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INDEX

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Sr. No	Name of the Author	Name of the Journal	Page. No
1.	Dr. Phalphe A. K.	Sugarcane Production: Irrigation And Fertilizer Application Practices	1-5
2.	Mr. Namdeo Pawar	Rajyashastrachi Olakh	6-12
3.	Mr. Namdeo Pawar	Mahila Sakshmikarnachi Aanandgatha	13-17
4.	Dr. Surendra A Shirsat	WAGES IN THE 18TH-CENTURY MARATHA REGION	18-357

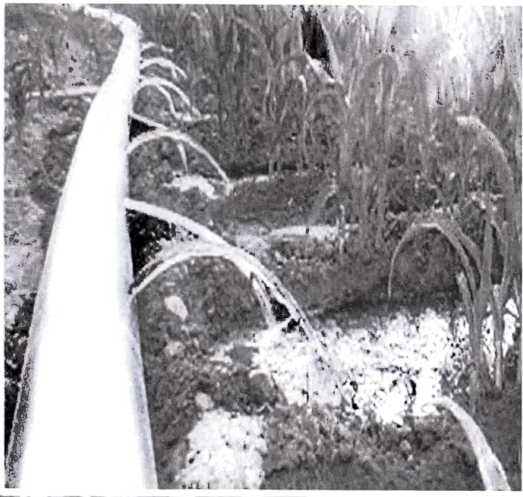

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ડૉ. આત્મારામ કિસન ફલફલે

ऊस उत्पादन:

सिंचन आणि खत उपयोजन पध्दती

डॉ. आत्माराम किसन फलफले

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अनुक्रमणिका

प्रकरणाचे नाव	पृष्ठ क्र.
प्रकरण — १ भारतातील ऊस उत्पादन: सद्यस्थिती	०१
प्रकरण — २ इंदापूर तालुक्याची भौगोलिक स्थिती	२८
प्रकरण — ३ इंदापूर तालुक्याचे कृषी भूमी उपयोजन	४८
प्रकरण — ४ इंदापूर तालुक्यातील ऊस उत्पादन आणि खत उपयोजन	६५
प्रकरण — ५ इंदापूर तालुक्याच्या निवडक गावातील सिंचनपद्धती	१०५
प्रकरण — ६ ऊस उत्पादन: खर्च व नफा विश्लेषण	१२६
प्रकरण — ७ सारांश आणि निष्कर्ष	२०८
संदर्भ ग्रंथ सूची	२१९


लेखक परिचय



डॉ. आत्माराम किसन फलफले
(एम. ए., नेट., पीएच.डी.)

- ❖ इंदापूर तालुका शिक्षण प्रसारक मंडळाचे कला, विज्ञान आणि वाणिज्य महाविद्यालय. इंदापूर येथे सहाय्यक प्राध्यापक म्हणून कार्यरत.
- ❖ एकूण १४ वर्ष महाविद्यालयात अध्यापनाचा अनुभव.
- ❖ वेगवेगळ्या राष्ट्रीय व आंतरराष्ट्रीय जर्नल्समध्ये १३ शोधनिबंध प्रकाशित.
- ❖ राष्ट्रीय सेवा योजना कार्यक्रम अधिकारी आणि यशवंतराव चव्हाण महाराष्ट्र मुक्त विद्यापीठाच्या अध्यासकेंद्राचे केंद्रसंयोजक म्हणून काम केले आहे.
- ❖ जानेवारी २०२१ मध्ये इंदापूर तालुक्यातील ऊस शेतीचा भौगोलिक अश्यास या विषयावर स्वामी रामानंद तीर्थ मराठवाडा विद्यापीठ, नांदेड विद्यापीठाची पी.एच.डी प्राप्त झाली.
- ❖ शैक्षणिक वर्ष २०१७ - १८ पासून महाविद्यालयीन परीक्षा आधिकारी म्हणून काम पाहत आहे.
- ❖ यशवंतराव चव्हाण महाराष्ट्र मुक्त विद्यापीठाच्या एम.बी.ए. अध्यासक्रमाचे समन्वयक म्हणून काम पाहत आहे .

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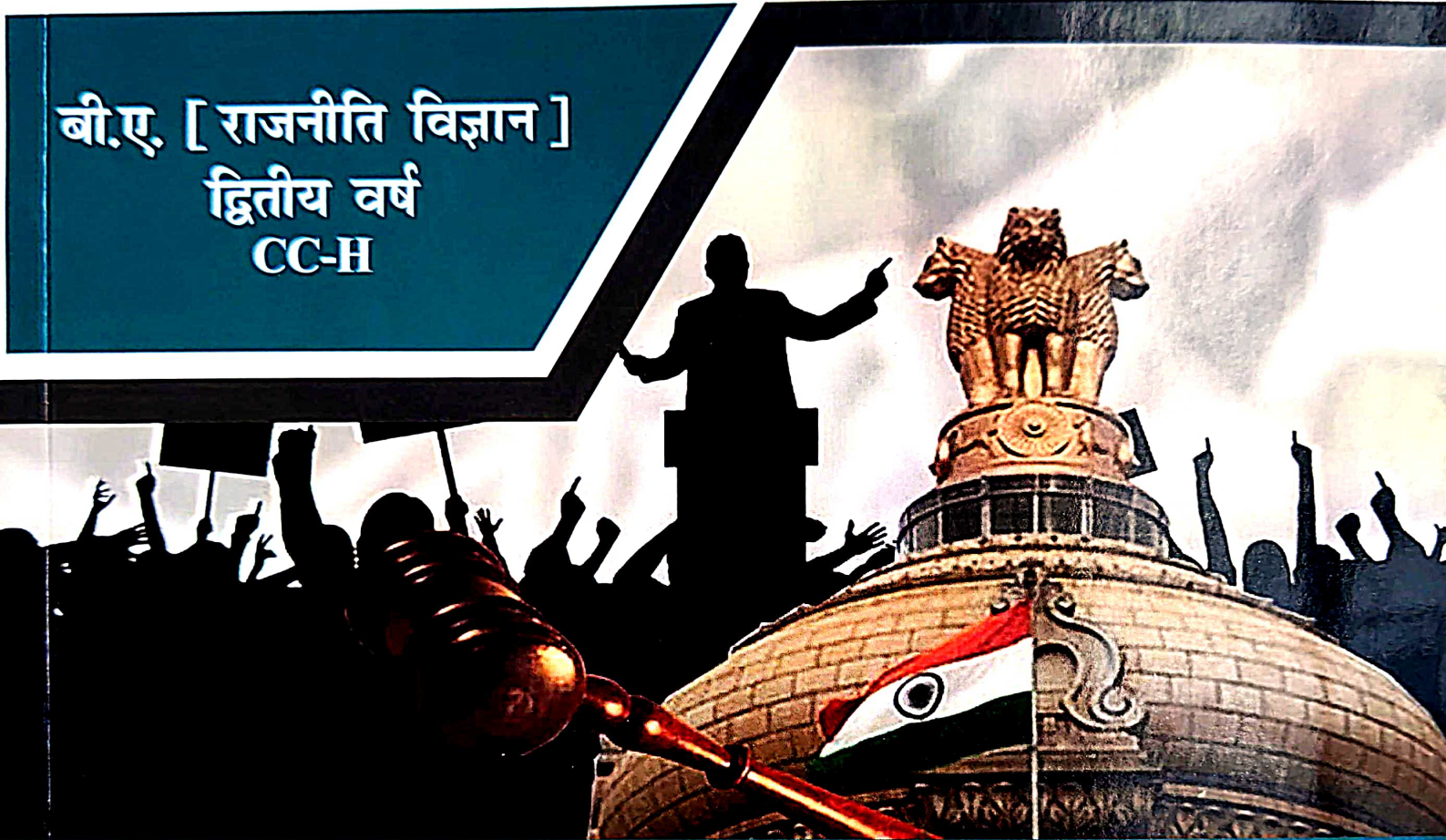
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अनुक्रमणिका

घटक क्र.	घटकाचे नाव	पृष्ठ क्र.
घटक १. राज्यशास्त्राचे अध्ययन		१०
१.० उद्दिष्टे		१०
१.१ प्रस्तावना		११
१.२ विषय विवेचन		१२
१.३ सारांश		३७
१.४ महत्त्वाचे शब्द		३७
१.५ सरावासाठी प्रश्न		३८
१.६ अधिक वाचनासाठी पुस्तके		३८
घटक २. राज्यशास्त्र अध्ययनाचे दृष्टिकोन		४२
२.० उद्दिष्टे		४२
२.१ प्रस्तावना		४३
२.२ विषय विवेचन		४५
२.३ अनुभववादी/वास्तववादी दृष्टीकोन		४८
२.४ स्त्रीवादी दृष्टिकोन		५१
२.५ वर्तनवादी दृष्टिकोन		५९
२.६ सारांश		६४
२.७ महत्त्वाचे शब्द		६५
२.८ सरावासाठी प्रश्न		६५
२.९ अधिक वाचनासाठी पुस्तके		६५
घटक ३. मूलभूत संकल्पना		७०
३.० उद्दिष्टे		७०
३.१ प्रस्तावना		७१
३.२ विषय विवेचन		७१
३.३ बाजारपेठ		८९
३.४ नागरी समाज		९४
३.५ सारांश		९७
३.६ महत्त्वाचे शब्द		९८

३.७ सरावासाठी प्रश्न
३.८ अधिक वाचनासाठी पुस्तके

१८
१८

घटक ४. लोकशाही

४.० उद्दिष्टे
४.१ प्रस्तावना
४.२ विषय विवेचन
४.३ सारांश
४.४ महत्वाचे शब्द
४.५ सरावासाठी प्रश्न
४.६ अधिक वाचनासाठी पुस्तके

१०२
१०२
१०३
१०३
१२३
१२३
१२३
१२३
१२४

घटक ५. मूलभूत राजकीय मूल्य

५.० उद्दिष्टे
५.१ प्रस्तावना
५.२ विषय विवेचन
५.३ समता : अर्थ व व्याख्या
५.४ न्याय : अर्थ व व्याख्या
५.५ सारांश
५.६ महत्वाचे शब्द
५.७ सरावासाठी प्रश्न
५.८ अधिक वाचनासाठी पुस्तके

१२८
१२८
१२९
१२९
१३९
१४५
१४९
१५०
१५०
१५०

घटक ६. हक्क

६.० उद्दिष्टे
६.१ प्रस्तावना
६.२ विषय विवेचन
६.३ सारांश
६.४ महत्वाचे शब्द
६.५ सरावासाठी प्रश्न
६.६ वाचनासाठी अधिक पुस्तके

१५४
१५४
१५४
१५६
१७१
१७१
१७१
१७२

घटक ७. विचारप्रणाली

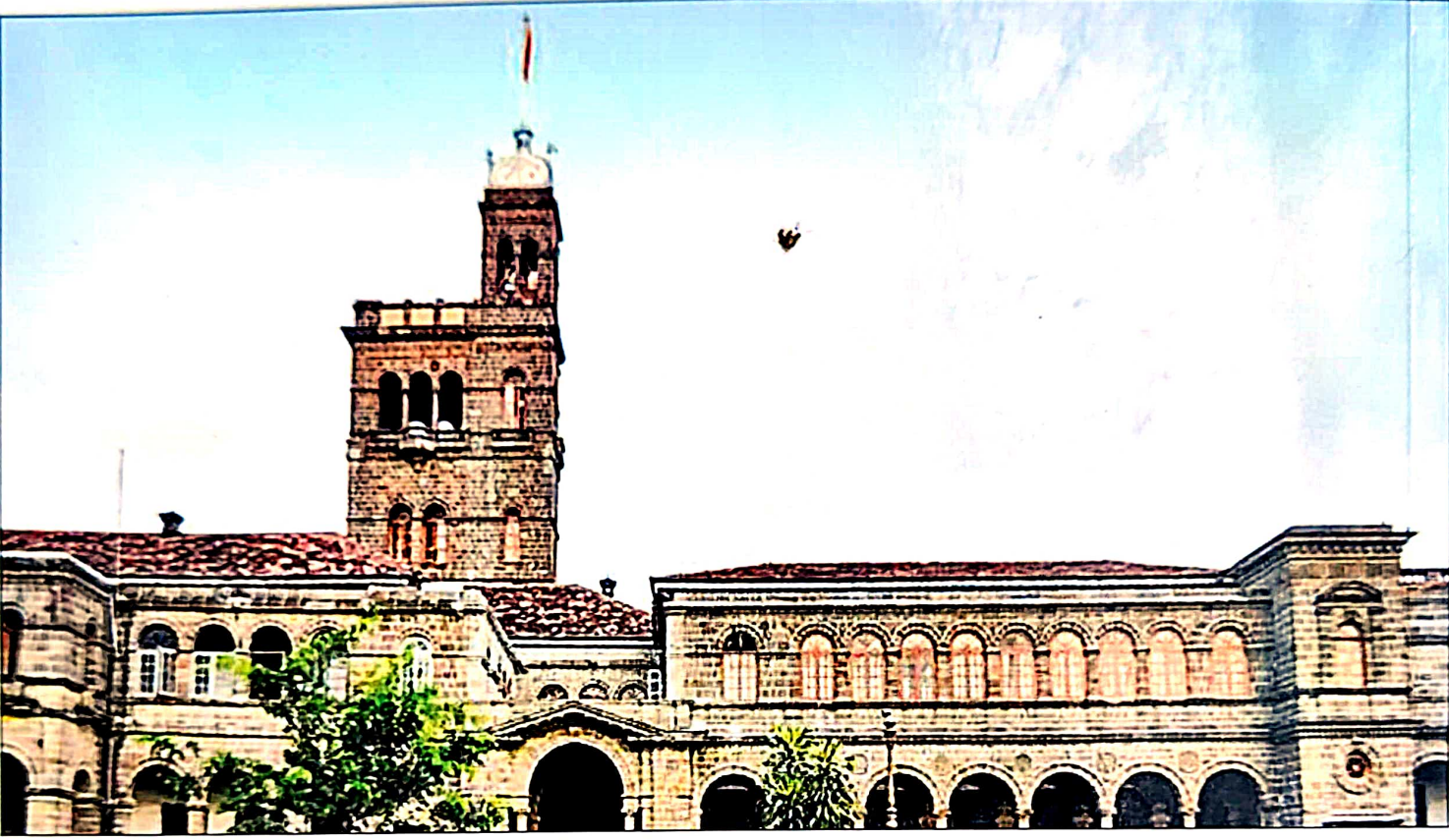
७.० उद्दिष्टे	१७६
७.१ प्रस्तावना	१७७
७.२ विषय विवेचन	१७८
७.३ राष्ट्रवाद	१७८
७.४ समाजवाद	१८६
७.५ फॅसिझम	२०१
७.६ सारांश	२२३
७.७ महत्त्वाचे शब्द	२३४
७.८ सरावासाठी प्रश्न	२३४
७.९ अधिक वाचनासाठी पुस्तके	२३६

घटक ८. आंतरराष्ट्रीय संघटना

८.० उद्दिष्टे	२४०
८.१ प्रस्तावना	२४१
८.२ विषय विवेचन	२४२
८.३ क्षेत्रीय संघटना	२७०
८.४ बहुराष्ट्रीय निगम (मल्टीनॅशनल कॉर्पोरेशन्स)	२७७
८.५ सारांश	२८०
८.६ महत्त्वाचे शब्द	२८०
८.७ सरावासाठी प्रश्न	२८०
८.८ अधिक वाचनासाठी पुस्तके	२८१

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मोबाईल - ८२०८०४२१९१

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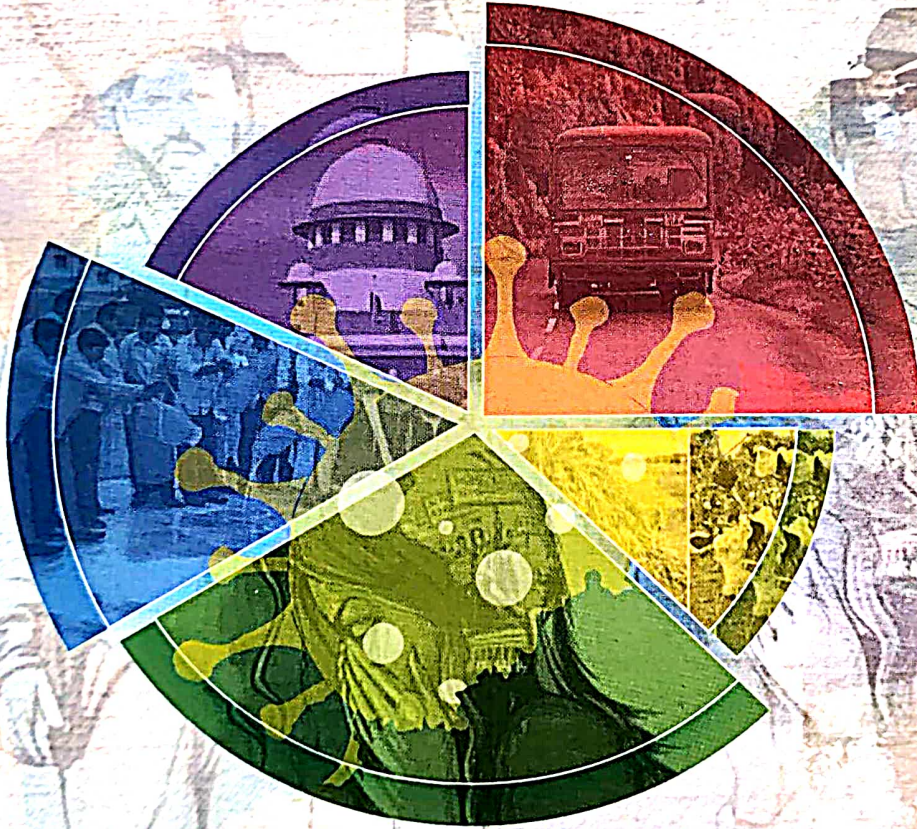


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■ एफपीओ वाला योगेश ! (सहाशे शेतकरी उत्पादक संस्थांना एकत्रित आणणारा तरूण)	निशिकांत भालेराव	२६३
■ भाजीपाल्याचे कॉर्पोरेटायझेशन	योगेश बिडवई	२६६
■ माझा चंदनशेतीचा प्रयोग	दीपक रमेशचंद्र शहा	२७६
■ विद्याताई रुद्राक्ष - शेतीतील निःकृतीच्या लेकीची भेट	लोकमित्र संजय काशीनाथ सोनटक्के	२७९
■ दुष्काळी गांव ते पाणीदार गावाचा प्रवास : अनोरे	डॉ. संदिप भाऊराव नेरकर	२८२
■ भोगाव तलावाचे पुनरुज्जीवन - निसर्गप्रेमी प्राचार्य डॉ. संध्याताई दूधगावकर यांची यशोगाथा	डॉ. राजेंद्र इंगळे । महेश भोसले	२८७
■ लामकानी: शाश्वत विकासाच्या दिशेने पाऊल टाकणारं गावं	संदीप धिवरे	२९२
■ शिक्षणाची पार्श्वभूमी नसणाऱ्या मुन्नाचे बिजनेस मॉडेल	प्रविण राठोड	२९५
■ महिला सक्षमीकरणाची आनंदगाथा	प्रा. नामदेव पवार	२९८

प्रत्येक ग्रामसभेत महिलाकेंद्री निर्णय होत होते. गावातील सर्व घरे महिलांच्या नावे करण्याचा अभिनव प्रयोग सुरू झाला. लग्न व इतर कार्यात महिलांच्या जेवणाच्या पंगती पुरुषानंतर होत. ही प्रथा गावाने मोडून महिला प्रथम ही विवेकी प्रथा सुरू केली. हिमोग्लोबिन तपासणी, मासिक पाळी स्वच्छतेविषयी जागृती, सॅनेटरी नॅपकिन भेट इत्यादी उपक्रम राबवले. हुंडा मुक्त गाव, कन्या दान, शुभ कार्यात विधवांना सहभागी करून विधवा सन्मान इत्यादी उपक्रम राबवून महिलांना प्रतिष्ठा दिली.

महिला सक्षमीकरणाची आनंदगाथा

प्रा. नामदेव पवार

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आनंदवाडी हे लातूर जिल्ह्यातील निलंगा तालुक्यातील गाव. या गावची लोकसंख्या ६३५ असून या गावात ११२ घरे आहेत. महात्मा गांधी यांच्या स्वप्नातील खेडे म्हणजे आनंदवाडी होय. गावाचा प्रवास स्वतःची स्वतंत्र ओळख नसणे, यापासून ते गाव विकासाचे रोल मॉडेल बनण्यापर्यंत झाला. गौर ग्रामपंचायतीमधून वेगळे होऊन १९९३-९४ साली आनंदवाडी गावाला स्वतंत्र ग्रामपंचायती दर्जा मिळाला. दोन गटांत विभागलेले गाव विठ्ठल मंदिर उभारण्यासाठी एकत्र आले. गावाच्या राजकारणावर देवस्थान मंडळाचा प्रभाव होता. तो मोडून ग्रामपंचायतीचे ग्रामसभेचे महत्त्व प्रस्थापित केले.

महाराष्ट्र शासनाची लोकसहभाग पुरस्कृत यशवंतराव चव्हाण ग्रामसमृद्धी योजना व लोकसहभागातून ग्रामपंचायत कार्यालय उभे राहिले. २००५ साली आनंदवाडी ग्रामपंचायतीचे सरपंचपद महिलांसाठी आरक्षित झाले. या संधीमुळेच गाव विकासाची व महिला सक्षमीकरणाची प्रक्रिया सुरू झाली. पहिल्या महिला सरपंचाने पहिला निर्णय घेतला, तो म्हणजे गाव हागणदारीमुक्त करण्याचा.

पहिल्याच ग्रामसभेत महिला मोठ्या प्रमाणात सहभागी झाल्या. शौचालये नसल्यामुळे महिलांची होणारी कुचंबना, मानहानी व आरोग्यहानी यांसाठी हागणदारीमुक्त गाव किती महत्वाचे आहे, हा विचार पुढे आला. घरात शौचालय बांधणे ही बाब लोकांना रुचत नव्हती. सरपंचासह काही समविचारी लोकांनी आधी केले मग सांगितले या उक्तीप्रमाणे स्वतःच्या घरी शौचालय बांधले. या कामाची पावती म्हणजे मा. राष्ट्रपती ए.पी.जे. अब्दुल कलाम यांच्या हस्ते ४ मे २००७ रोजी आनंदवाडी गावाला निर्मलग्राम पुरस्कार देण्यात आला.

प्रत्येक ग्रामसभेत महिलाकेंद्री निर्णय होत होते. गावातील सर्व घरे महिलांच्या नावे करण्याचा अभिनव प्रयोग सुरू झाला. गाव तंटामुक्त झाल्याशिवाय गावाचा शाश्वत विकास साधता येत नाही. त्यामुळे गावातील जातीय सलोखा टिकून राहिला पाहिजे, तो वाढला पाहिजे यासाठी सर्व सांस्कृतिक सण व राष्ट्रीय उत्सव सर्वांनी जाणीवपूर्वक सामूहिक सहभाग घेऊन साजरे करण्यावर भर दिला गेला. लग्न व इतर कार्यात महिलांच्या जेवणाच्या पंगती पुरुषानंतर होत. ही प्रथा गावाने मोडून महिला प्रथम ही विवेकी प्रथा सुरू केली. लग्न खर्च

■ आशा कार्यकर्त्या मनीषा तंगडपल्ले यांच्या नेतृत्वाखाली मासिक पाळीबद्दलच्या संवादाचे सामान्यीकरण होणे हे गावाला अभिमानास्पद वाटणाऱ्या बदलांपैकी एक आहे. 'मासिक पाळी ही एक नैसर्गिक प्रक्रिया आहे, लाजतात. आम्ही अंगणवाडीत बसवलेले सॅनिटरी नॅपकीन डिस्पेंसर ५ रुपयांना तीन नॅपकिन देतो. लवकरच आम्ही नॅपकिनची सुरक्षित विल्हेवाट लावण्यासाठी एक मशीनही बसवू.' - मनीषा तंगडपल्ले

■ तालुक्यातील डोंगरगाव या गावाने सर्व महिलांची पंचायत निवडली होती. पण गौर गावापेक्षा डोंगरगावात लोकांचा त्यांना विरोध झाला. ग्रामपंचायत निवडणूक राजकीय पक्षांच्या चिन्हांवर लढवली जात नाही परंतु उमेदवारांना पक्षाचा पाठिंबा असतो. गौर गावात उमेदवारांची निवड गावकऱ्यांनीच केली होती. गावातील प्रॉपर्टी कार्ड सर्व महिलांच्या नावावर आहेत. स्त्रिया आणि पुरुष दोघेही त्यांच्या शेतात सारखेच कष्ट करतात. - आ. संभाजी पाटील निलंगेकर

टाळण्यासाठी मुलींचे लग्न मे महिन्यात एकाच दिवशी करून सर्व भेटवस्तूंचा खर्च लोकवर्गणीतून केला जातो.

महिलांच्या आरोग्याच्या प्रश्नावर या गावाने केलेले कार्य उल्लेखनीय आहे. हिमोग्लोबिन तपासणी, मासिक पाळी स्वच्छतेविषयी जागृती, सॅनेटरी नॅपकिन भेट इत्यादी उपक्रम राबवले. हुंडा मुक्त गाव, कन्या दान, शुभ कार्यात विधवांना सहभागी करून विधवा सन्मान इत्यादी उपक्रम राबवून महिलांना प्रतिष्ठा दिली. रक्षाबंधन सण सामूहिकरीत्या साजरा करण्याची परंपरा गावात सुरू केली. गावातील महिला गावातील पुरुषांना राखी बांधतात आणि भाऊ भेट म्हणून भाऊ बहिणीच्या आरोग्यरक्षणासाठी शिबिरे घेऊन तपासणी व उपचार करतात. नागपंचमी स्मशानभूमीत साजरी करून नागाविषयी असलेली भीती व काही अंधश्रद्धा घालवण्याचा प्रयत्न केला जातो.

पाणी फाउंडेशन पुरस्कृत सत्यमेव वॉटर कप स्पर्धेत ४५ दिवसांच्या प्रत्यक्ष श्रमदानात महिलांचा मोठा सहभाग राहिला आहे. या सर्वांचे एकत्रित फळ म्हणजे तालुकास्तरीय दुसऱ्या क्रमांकाचे दहा लाख रुपयांचे बक्षीस पाणी फाउंडेशन व महाराष्ट्र शासनातर्फे या गावाला मिळाले आहे.

२०२१ ग्रामपंचायत सर्व महिला बिनविरोध : आनंदवाडीतील महिला पर्वाच्या उदयानंतर व महिला सक्षमीकरणानंतर निश्चितच पुढचा टप्पा म्हणजे सर्व महिलांनी बिनविरोध निवडून येणे हा होता. तो पूर्ण करून

महिलांच्या हाती गावाचा कारभार सोपवला गेला. दोन-वेळा सरपंच राहिलेल्या भाग्यश्री चामे यांच्यामुळे अनेक महिला राजकीयदृष्ट्या सक्रिय झाल्या. ग्रामपंचायतीच्या निवडणुकीत सातही जागा ग्रामसभेच्या बैठकीत एकमताने बिनविरोध निवडून आणल्या. तंटामुक्ती समितीचे अध्यक्षपदही महिलेकडे सोपविण्यात आले आहे. गडचिरोली जिल्ह्यातील मेंढालेखा गावातील नागरिकांनी 'दिल्ली मुंबईत आमचं सरकार, आमच्या गावात आम्हीच सरकार' अशी घोषणा दिली होती. याच्याही पुढे जाऊन 'आमच्या गावात महिला सरकार' पर्यंतचा टप्पा आनंदवाडी गावाने गाठलेला आहे. हा टप्पा निश्चितच आशादायक व प्रेरणादायक आहे.

संदर्भ

१. चामे ज्ञानोबा, २०२१, निर्मिले अस्तित्व माझे; आनंदवाडीची यशोगाथा, ग्रामपंचायत कार्यालय.
२. Mayura Janwalkar, 2021, After Strides in Social Welfare, Latur Village hands over baton to all Woman Panchayat, The Indian Express, 25 January.

प्रा. नामदेव पवार (निलंगा)

प्रगतशील शेतकरी व मराठा समाज संघटनांचे अभ्यासक

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मोबाईल - ९८८१०३९६२१
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CONTENTS

<i>List of Figures</i>	ix
<i>List of Tables</i>	xi
<i>Preface</i>	xvii
Introduction: The Study of Wages in India 1500–1900	1
1 Wages, Income and Living Standards in Western India, 1510–1570 <i>Hélder Carvalho, Paulo Teodoro de Matos and Jan Lucassen</i>	43
2 Wages and Prices in Madras c. 1650–1720 <i>Radhika Seshan</i>	85
3 Wages, Prices and Money in 18th-century Maharashtra <i>Rekha Ranade</i>	109
4 Wages in the 18th-century Maratha Region <i>Surendra Arjun Shirsat</i>	122
5 Wages in Sinnar <i>Pargana</i> during the 18th Century <i>Anjali Soitkar Vekhande</i>	146
6 Wage Labour and Other Forms of Remuneration in the Deccan in the 1820s <i>Jan Lucassen</i>	166
7 Construction Workers, Remuneration and Welfare Levels: An Indian Region during the 1860s <i>Dhiraj Kumar Nite</i>	241
8 Wage Payments and Labour Productivity: The 1896–1897 Famine in North-Western Provinces and Oudh <i>Amal Shahid</i>	275
<i>About the Editors and the Contributors</i>	298
<i>Index</i>	302

LIST OF FIGURES

1.1	Main Portuguese Settlements in Western India, c. 1560	46
2.1	Price Fluctuations of Ordinary Longcloth (Pagodas per <i>Corge</i>), Madras 1674–1720	101
2.2	Price Fluctuations of Ordinary <i>Salampore</i> (Pagodas per <i>Corge</i>), Madras 1674–1720	101
2.3	Price Fluctuations of Ordinary <i>Morees</i> (Pagodas per <i>Corge</i>), Madras 1674–1720	101
4.1	The Maratha Region in the 18th Century	124
4.2	Movement of Prices of Millet (Kg per ₹), Pune 1760–1765 to 1816–1820	140
5.1	Sinnar Pargana with Its 14 <i>Dehe</i> (Villages) and <i>Kasba</i> Sinnar (1707–1818; Not to Scale)	148
7.1	Real Wages in the Base Year of 1861 (the Price of Subsistence Living Basket)	252
7.2	Subsistence or Welfare Ratios	258
7.3	Subsistence Ratios (Bare-bane Basket of Subsistence)	258
7.4	Price Trends of Subsistence Basket (Primary Axis) and Price Trends of Jowar and Rice (Secondary Axis)	264

LIST OF TABLES

I.1	Purchasing Power of Wages (Kg of Grain per Day), India 950–1600	8
I.2	A List of Private Servants in the Family	15
1.1	Entries for Remunerations of Boys	52
1.2	Portuguese Settlements for Which Relevant Wage Data Are Available between c. 1514 and 1570	54
1.3	Number of European and Non-European Entries of Individual Daily Income on the Data Set, per Location and Sub-period (1514–1570)	56
1.4	Number of European and Non-European Entries of Individual Daily Maintenance on the Data Set, per Location and Benchmark (1507–1570)	60
1.5	Nominal Average Income for Skilled Occupations of European and Indian Workers in Western India, 1514–1570 (Reais per Day)	63
1.6	Nominal Average Income for Unskilled Occupations of European and Indian Workers in Western India, 1514–1570 (<i>Reais</i> per Day)	65
1.7	Average Income of Labour Migrants Recruited for the Reconstruction of the Fortress of Diu, 1547 (in Reais per Day)	66
1.8	Average Prices for Basic Commodities in Western Coastal India, 1514–1570 (in <i>Reais</i> per Kg)	67
1.9	Evolution of Average Nominal Maintenance Paid to European and Indian Skilled and Unskilled Workers, 1507–1570 (<i>Reais</i> per Day)	71

1.10	Real Income of European and Indian Skilled Labour Expressed in Rice, 1514–1570 (Purchase Power of Kg per Day)	72
1.11	Real Income of European and Indian Unskilled Labour Expressed in Rice, 1514–1570 (Purchase Power of Kg per Day)	73
1.12	Wage and Income Development of Unskilled Indian Workers, 1311–1650 (Expressed in Kg of Rice and Grain per Day)	74
2.1	Payments to Soldiers, Madras 1675	89
2.1a	Annual Salaries Paid to Portuguese Soldiers in Fort St. George (Described as the Christian Town in the Records), 1681	90
2.1b	Annual Salaries Paid to Soldiers ‘in the Malabar Town’ (i.e., in the Indian Part of the Settlement), 1681	90
2.2	Annual Wages Paid Out by the Company’s Army at Golconda 1709	92
2.3	Customary Rights or Allowances in 1672	94
2.4	Allowances for English EIC Employees at Madras, 1672–1678	95
2.5	Allowances in Pagodas at Masulipatam, pre-1674 and 1674	95
2.6	Wages and Food Rations (between Brackets) of Ordinary and More Skilled Male Wage Labourers (Military/Civil and in the Labour Market), Tamil Nadu 1654–1709 (<i>Fanams</i> per Month)	96
2.7	Price of Cotton, Madras 1671–1712	99
2.8	Prices of Different Types of Cotton Cloth, Madras 1674–1701	100
2.9	Prices of English Goods (Pagodas per Candy) Taken by the Indian Merchants, Madras 1673–1674	102
2.10	Increase in Rates Sought by the Washermen, Madras 2 April 1706	104

3.1	Salaries for Garrison	113
3.2	Salaries for Naval Employees	115
3.3	Prices of Various Food Items	118
4.1	Salary–Expenditure Proportion: Maratha Empire 1763 to 1772	125
4.2	Salary Expenditure Proportion in the Forts Near Pune Town	125
4.3	Salary Expenditure Proportion in Pune <i>Prant</i> , from 1738–1739 to 1785–1786	126
4.4	Salaries of Civil Servants and Military of the Central Government	128
4.5	Annual Salaries for Officials of Pune <i>Prant</i>	129
4.6	Salaries Paid by the Central <i>Kotawali</i> Office of <i>Kasba</i> Pune, 1767–1768	130
4.7	Annual Salary of Naganath Narayan, <i>Killedar</i> (Commander) <i>Sinhagad</i> fort 1764–1765	131
4.8	Salaries for <i>Sinhagad</i> Fort 1764–1765	132
4.9	Privately Paid Wages in the Pune <i>Prant</i> in the First Half of the 18th Century	134
4.10	Group-wise Payment of 13 Horsemen in 1789	137
4.11	Prices of Food Grains, Pune 1760–1765 to 1816–1820	139
5.1	Revenue Collection (<i>Ain Jamabandi</i>) of Sinnar <i>Pargana</i> , 1756–1818	150
5.2	Governmental Income of Some <i>Kamavisdars</i> of Sinnar <i>Pargana</i> from 1758–1759 to 1795–1796	152
5.3	Salary per Annum of <i>Majumdar</i> and <i>Phadnis</i>	152
5.4	Annual Wages of Clerks, 1758–1786	153
5.5	Wages Paid in One Military Unit, Headed by a <i>Shiledar</i> in 1774–1775	155
5.6	Prices of Agriculture Commodities in Sinnar	160

6.1	Administrative Divisions of the Deccan, c. 1820, 1874, and Now	171
6.2	Population, Deccan, 1822	173
6.3	Class/Status Distribution (Percentages of Total Population), Deccan, the 1820s	175
6.4	Sex Ratios (Males to Females), Deccan, the 1820s	179
6.5	Sex Ratios (Males to Females) by Age Group, Deccan, the 1820s	180
6.6	Crude Age Divisions, Deccan (Selection), the 1820s	181
6.7	Age Division of Sawunt Waree State, 1851	182
6.8	Schools per Inhabitants, Deccan (Selection), the 1820s	183
6.9	Social and Gender Division of Children under 11, Sawunt Waree State, 1852	184
6.10	Urban Populations, Deccan, the 1820s and 1872	186
6.11	Basic Demographic Estimates as a Point of Departure for the Reconstruction of Labour Relations (Excluding Slaves, Military and <i>Bhils</i>) \times 1,000, Deccan, the 1820s	189
6.12	Occupational and Social Structure of Heads of Household, Haveli <i>Pargana</i> , 1825–1826	191
6.13	Shops in Ahmednagar City, 1822 and 1828	192
6.14	<i>Sahyer</i> Taxation and Customs (₹ per Year), Deccan, 1827–1828	193
6.15	Economic Activities Taxed under the <i>Sahyer</i> System (₹ per Year), Vangi and Tullegaon, the 1820s	194
6.16	Weavers, Deccan, c. 1820	195
6.17	Reconstruction of Primary Labour Relations of the Working Urban Population (Those Able to Work and Those Actually Working) \times 1,000	196
6.18	Reconstruction of the Number of Rural Heads of Household, Deccan, the 1820s	198
6.19	Registered and Taxpaying <i>Bara Ballooteh</i> (Selected Population), Deccan 1827–1828	199
6.20	Registered <i>Bara Ballooteh</i> Occupations (Selected Population)	199

6.21	Reconstruction of Categories of Rural Heads of Household (Selection \times 1,000), Deccan, the 1820s	201
6.22	Agricultural Characteristics (Selected Population), Deccan, 1822	203
6.23	Sellers at the Market of Goreh, 26 January 1826	207
6.24	Farmers' Household Budgets, Showing Employment of Male and Female Wage Labourers, Deccan 1824–1825	210
6.25	Reconstruction of Labour Relations (Selected Population \times 1,000), Rural Deccan, the 1820s	211
6.26	Reconstruction of the Primary Labour Relations of the Total Rural Population (Those Able to Work and Those Actually Working) \times 1,000, Deccan, the 1820s	212
6.27	Reconstruction of the Primary Labour Relations of the Total Population \times 1,000, Deccan, the 1820s	213
6.28	Wages of Agricultural Labourers, Bombay–Deccan (Monthly Pay in ₹), 1827, 1830–1831	215
6.29	Wages/Earnings of Non-agricultural Occupations, Bombay–Deccan (Monthly Pay in ₹) 1814, 1828	216
6.30	Usual Rates of Hire per Month of Artificers, Coolies, Etc., at the Principal Military Stations (in ₹ and Annas per Month)	218
6.31	Wage Developments (in ₹ and Annas), Poona 1775–1852	220
7.1	Wages (₹. – As. – Pies). (₹ = 16 As) (1 As = 12 Pies)	248
7.2	Wages	249
7.3	Real Wages in the Base Price of the Monthly Subsistence in 1861 {MW/(Pt/Pb)}	250
7.4	Real Wages in the Price (Pb) of the Monthly Subsistence in 1861 (MW/(Pt/Pb))	251
7.5	Basket of Subsistence	255
7.6	The Cost of Subsistence (₹)	256
7.7	Subsistence or Welfare Ratios	257

PREFACE

This volume of collected chapters is broadly based on two workshops that we were able to organize around the theme of wages in pre-statistical India. The first workshop was held in New Delhi as part of the Indo-German research programme *M. S. Merian – R. Tagore International Centre of Advanced Studies ‘Metamorphoses of the Political’ (ICAS:MP)* and the second at Savitribai Phule Pune University (formerly the University of Pune). We would like to thank both institutions and their staff for their excellent support, as well as the participants who provided papers or contributed to the discussions. In particular, we must mention the help and support that we received from the Head of Administration, ICAS:MP, Laila Abu-Er-Rub.

The questions around which these workshops were initially conceptualized were developed over a period of few years and were formulated primarily by Professors Jan Lucassen and Professor Najaf Haider of the Centre for Historical Studies, JNU, New Delhi. Professor Radhika Seshan joined in later. In some ways, our starting point was the Great Divergence debate and the relative absence of India in this debate, as well as our belief that a discussion on these themes, based on sources that were either un- or underutilized, would help in locating India in the economic systems of the early modern world in much clearer ways. Our main concerns were, of course, the objective of collecting new data, but, in addition, we focused on methodological issues and the potential of so far unexplored collections, primarily those written in Indian languages. To this end, we brought together a team of both young and veteran scholars in the field. We feel it is necessary to state that our early expectations have been substantially fulfilled, and what is particularly exciting for us is the wealth of data that have

now been brought to light, which, we believe, will substantially add to our knowledge of wages and the labour market in India in the early modern age.

For several reasons, not all of the papers that were presented at the workshops could be included in this volume; however, the present selection reflects the main points of discussion. Due to health problems, Professor Haider was able to contribute to the organization of the conferences and the concept of the volume, but not to its publication.

We would like to express our sincere thanks to the editors of the SAGE series **Politics and Society in India and the Global South** for including our volume in the series. Our special thanks to Abhijit Baroi, formerly with SAGE, for seeing us through all of the initial stages of working out our initial proposal for the volume and for helping us polish it. Amrita Dutta of SAGE took over when Abhijit left and has continued to help us. A very big thank you to Debjani Mazumder, Publisher, ICAS:MP, for all the handholding and for answering all of the questions with which we kept bombarding her!

Jan Lucassen
Radhika Seshan
Najaf Haider

INTRODUCTION

The Study of Wages in India 1500–1900

At first sight, the study of wage levels and the purchasing power of wages looks like a specialized and academic topic of little concern to the general public. As this book will demonstrate, however, this is not the case. On the contrary, the study of wages opens up vistas of the daily lives of the working people, their standard of living, as well as economic developments at large. For that reason, wage levels not only take an important place in social and labour history but also in economic and world history.

In social history, the way wage labourers are remunerated is an indicator of their well-being; in labour history, disparities between effort and remuneration are indicators of unequal power relations. In economic history, real wage levels (i.e., the purchasing power of wages) are among the main components of national income (Broadberry et al., 2015; Drèze & Sen, 2013; Leeuwen, 2007). In global history, the comparison between the performance of countries, which includes their national incomes, takes centre stage, particularly in the so-called Great Divergence Debate, as we will see below.

Obviously, this also goes for India. Indeed, currently, it may be more relevant to India than to any other country. Why such a bold statement? First, because the virtues and flaws of the different great eras in Indian history (the Mughal, the successor states, the colonial and the independent ones) are a hotly debated subject. Second, the same is also true for the virtues and flaws of social inequality, where the traditional Indian hierarchical society model is juxtaposed with modern egalitarian thinking along the lines of

the Declaration of Universal Human Rights. Third, India is one of the major civilizations in world history—next to especially Chinese and European culture (without disparaging others)—and the performance of Indian civilization with respect to economy, society and culture is crucial for any historical comparison on a global scale.

We cannot, and will not, address all of these big issues, but we will try to demonstrate how the knowledge of wages in the past is a crucial building block for starting to understand them. We will do so in this Introduction by addressing the following matters: the Great Divergence debate; the place of wage labour in Indian society over the last 500 years; the opportunities and pitfalls of the historical study of wages in India and the contribution of the chapters in this volume to an advanced understanding of these phenomena.

1.1. INDIA IN THE GREAT DIVERGENCE DEBATE

European political and economic domination over the Americas, Africa and major parts of Asia in recent centuries, and its consequences, which still reverberate today, raises questions about whether this arose due to a specific coincidence of circumstances, or whether there were deep-rooted inequalities between the major centres of civilization around the globe (Lucassen, 2021; Pomeranz, 2000). Of course, the victors, including the Spaniards, the English and the French, became convinced that their civilization was superior in many, if not all, respects. They defined themselves as the inheritors of the cultural achievements of the Greeks and the Romans and the morality of Christianity, culminating in the Renaissance, Enlightenment and the Industrial Revolution. No wonder that commercial entrepreneurship was then combined with a missionary zeal to convert their overseas subjects to Christianity, most of all in the Americas.¹

This classification of civilizations as inherently successful or failing was already being questioned, albeit initially only by a few, in the heyday of colonialism and imperialism, but this critique gained force in the late 20th century. On the one hand, it was inspired by the disasters caused by the internecine world wars, which undoubtedly had to be blamed on European nations and resulted in the Universal Declaration of Human Rights (1948). On the other hand, decolonization movements became a catalyst and

also triggered academic research into the root causes of especially economic inequality between ‘the West and the rest’. Is this to be blamed solely and entirely on the long-term consequences of colonial exploitation? To a certain extent it is, and many historians, including Immanuel Wallerstein (1974–1989; cf. Pomeranz, 2000, pp. 14–15), have expanded on this. However, the longer the distance between the present and the date of decolonization, the stronger the curiosity for additional and alternative explanations. Crucial for any historical assessment, of course, is the precise dating of unequal development: have the different parts of Eurasia been divergent since a time before European overseas expansion, or did this happen later? And, if so, did these two processes coincide exactly, partially, or not at all?

These questions have been raised in an explicit and very precise way by American historian Kenneth Pomeranz and his colleagues of what has been called the ‘California School’. In a path-breaking study that inaugurated the second millennium of our era, Pomeranz compares the economic achievements of advanced parts of Europe and China in especially the 18th and 19th centuries by stating:

differences in climate, soil, etc. might have given different areas different preindustrial possibilities. But it seems unlikely that Europe enjoyed a substantial edge in those possibilities over all densely settled regions, particularly since [...] it did not in fact become much better-off than East Asia until industrialization was well under way. (Pomeranz, 2000, p. 9)

Leaving Pomeranz’s arguments and the extensive discussion they triggered in relation to China aside for now,² we instead focus on his suggestion that other ‘densely settled’ parts of Eurasia may also have experienced similar economic levels as Western Europe and China until the end of the 18th century. Besides Japan, he also considers India to be a candidate, particularly Gujarat and the north of the subcontinent in general—though he has some clear reservations (Pomeranz, 2000, pp. 146–148, 212–215; see also pp. 40, 131–134, 174–178, 259–260, 293–295). These include the caste system, the extension of bonded labour and the restrictions that these systems put on the mobility and hence the earning and purchasing power of the common man and woman, which are necessary for economic growth. Pomeranz is careful not to present strong

conclusions about India. In reaction to an influential study (1998) on Indian wages by the Indian historian Prasannan Parthasarathi, for example, he thinks that, for the 18th century, 'it still seems too early to speak of rising popular consumption in India as comparable to that in other places' (Pomeranz, 2000, p. 147, in response to Parthasarathi, 1998).³

In 2011, the same Parthasarathi published a comprehensive study on the Great Divergence, in which India took centre stage (Parthasarathi, 2011, also 1998, 2001 and 2005). He is more confident than Pomeranz about India's performance.

the period between 1600 and 1800 was a time of great economic and political dynamism in the advanced regions of the Indian subcontinent. Vibrant production of cotton textiles for export led to sizable inflows of silver, gold, copper and cowries which fuelled a commercial revolution.

However, this would subsequently change: 'From the second decade of the nineteenth century there was a sustained economic regression in Bengal, South India, Gujarat and other regions of seventeenth- and eighteenth-century dynamism' due to the 'rise of the British colonial order' (Parthasarathi, 2011, pp. 265–266).

Between Parthasarathi's 1998 article, which compares wage levels in South India and England in the 18th century, and the publication of his monograph on India in the Great Divergence debate 13 years later, a number of economic historians, in particular Stephen Broadberry and Bishnupriya Gupta (2006), Robert Allen (2007), Allen and Studer (2009), Allen et al. (2011), Sashi Sivramkrishna (2009), Tirthankar Roy (2010) and others, had entered the debate on real wage levels (for later contributions to the discussion: Broadberry & Gupta, 2017; Broadberry et al., 2015; Ghosh, 2015; Yazdani, 2017; Zwart, 2016; Zwart & Lucassen, 2020).⁴

Whereas Sivramkrishna, in a study on Mysore 1800, broadly supported Parthasarathi's arguments, the others did not. Conceding that more research was still needed, Parthasarathi nevertheless argued that his original conclusion was right: 'Thus there does not appear to be any compelling reason to believe that the labouring populations of Britain possessed a higher standard of living [than those of India]' (Parthasarathi, 2011, p. 46).⁵ In doing so, he

remained an advocate of the California School, which stressed that the bifurcation between ‘the West and the rest’ only really happened around 1800 against the idea of ‘a European takeoff in the context of long-standing European dynamism *versus* long-standing Asian stagnation’ (Studer, 2015, p. 14).

A few years later, Roman Studer gave a new twist to India’s place in the Great Divergence debate in a monograph that took market integration between 1600 and 1900 as a starting point (Studer, 2008, 2015; cf. Caruana Galizia, 2015). For Studer (2015, pp. 147–149), market integration is an important, if not the pre-eminent, motor for economic growth. In his view, market integration of especially grain prices in India ‘only really started in the second half of the 19th century’, thus refuting the claims of Pomeranz or Parthasarathi. The value of his conclusion is weakened, however, by the fact that he does not have price data before 1700 and that his real comparisons between different grain markets in India start only in 1764 (Studer, 2015, pp. 72–98).

Further, Studer’s wage data (2015, pp. 200–202) are very limited: 79 for the 17th century; 47 for the 18th century; 65 for the first half of the 19th century and 200 for the second half of the 19th century. Regionally, this meant 131 wage quotations for eastern, 78 for western, 63 for northern and 119 for southern India. The fact that he includes data produced by his predecessors indicates how limited the quantitative basis for all this work is—a fact that all participants in the debate deplore while simultaneously drawing firm conclusions (cf. Bosma, 2014). Nevertheless, some even use the few wage data they know to reconstruct the gross national product (Broadberry et al., 2015; Roy, 2010; Studer, 2015). According to Studer (2015, pp. 170–176, 200–201), ‘the overall picture that emerges closely resembles the one on integration and GDP per capita: throughout the early modern period, wages were substantially lower in India than in Europe, the ratio being again in the region of one to two in the eighteenth century.’ And real wages remained at that same low level during the next century.

This lack of good and representative sources motivated Pim de Zwart and Jan Lucassen (2020) to collect substantially more data for a new attempt to establish when precisely real wage levels for unskilled labourers started to diverge between Western Europe

and North India. They collected over 7,500 observations between 1595 and the early 1870s for that part of the subcontinent, 20 times as many as their predecessors. Although aware that their data for the second half of the 17th century is fairly thin, they arrive at a conclusion midway between the pessimists, who think that, from the 16th century on, India's wage levels were already lagging behind those in Western Europe, and the optimists, who think that this dates only from c. 1800. To be fair, and neglecting for a moment the narrow evidence base of the optimists Parthasarathi and Sivramkrishna, it is possible to reconcile their outcome and that of de Zwart and Lucassen: after all, the latter authors base their conclusions on data from North India and Parthasarathi (to a great extent) and Sivramkrishna (completely) on data from the South (for Mysore, see also Yazdani, 2017, pp. 149–150, 165–170; for Gujarat, see Yazdani, 2017, pp. 391–401). This possibility of diverging economic developments in the North and the South in the 18th century is, however, only conceivable if we accept a very low degree of market integration. Currently, this seems unlikely, but it may be researched in the future as soon as enough data for South India become available.

In any case, for the north of the subcontinent, de Zwart and Lucassen discern a 'slightly downward trend since the late 17th century' of unskilled wages, and they would remain (like those of Beijing) around subsistence level from c. 1700 until far into the 19th century (see also Chapter 6 by Jan Lucassen in this volume), whereas, in the same period, those in Europe (and most of all in London) fluctuated at around twice this level or more. This gap between England (to be precise, wages in a small town like Oxford and certainly in London) and North India, which appeared in the late 17th century, widened after the 1720s and especially after 1800. This trend is the same for both unskilled labourers and skilled craftsmen. After c. 1700, only the contribution by waged women and children to household income allowed Indian families of wage earners to survive.⁶

If we accept that the provisional outcome of the debate about wage levels in the framework of the Great Divergence debate provides some clarity for the period after 1700, or even 1600, the question of what happened before that remains unanswered. de Zwart and Lucassen's assertion about India's favourable economic achievements before c. 1700, on a par with other major civilizations in

Eurasia, is in line with a number of studies by Najaf Haider. In the tradition of the Aligarh School (in particular Irfan Habib), this expert in the economic history of Mughal India has collected as many early sources as possible regarding wages and prices (including those in Persian and Arabic; Habib, 1994; Haider, 2004, 2007, 2010; cf. Manzar, 2021).

Leaving aside wage indications in the *Arthashastra* of Kautilya (1992; cf. Lucassen, 2021), which, in the extant version, may be placed in the 3rd century CE, the earliest wage data for North India are available for the decades around 1300, and published and analysed by Habib. Expressed in kg of wheat or rice per day, they were substantially lower than the wage rates given in the *Ain-i-Akbari* of c. 1595, as analysed by Haider. Recently, Luso-Indian wage data have become available for Kannur 1516–1517, which, to a certain extent, may bridge the gap of three centuries between 1300 and 1600. They suggest stable low wage levels between 1300 and 1500, as compared to much higher levels in 1595 and possibly later (de Matos & Lucassen, 2019).

A few even earlier wages are known for the South. Unfortunately, they only concern skilled and highly skilled artisans, employed by temples in three different districts, and Vijaya Ramaswamy (2004) is hesitant to draw firm conclusions.⁷ If, however, we consider the masons' wages of 1011 as exceptionally high outliers among the other early evidence, we might conclude that the wage levels up to c. 1500 are more or less at the same low level, and certainly much lower than those c. 1600, which suggests a wage hike somewhere in the 16th century (see Table I.1, which summarizes what was known before the publication of our volume about the purchasing power of wages, expressed in wheat and rice up to 1600).

The first contribution to this volume (Chapter 2) attempts to be more precise as to when this hike may have taken place and points to the 1540s as a good candidate. Consequently, this may have been the start of a high wage level in the 17th century, but the authors hesitate to say anything definitive about how long these much-improved income levels, found around the mid-16th century, would subsequently endure.

There seems no doubt that at the end of the 17th century, wages started a downward trend, reaching a stagnant minimum

Table I.1 Purchasing Power of Wages (Kg of Grain per Day), India 950–1600

			Wheat Grain Wage		Rice Grain Wage	
			Unskilled	Skilled	Unskilled	Skilled
951–952	Erichchaudaiyar (Tirunelveli)	Stonemason				2.24
		Master carpenter				4.48
978	Umamahesvara (Thanjavur)	Blacksmith, carpenter				1.12
		Master carpenter				2.24
1011	Brahadisvara (Thanjavur)	Stonemason (apprentice)				6.72
		Master mason				7.00
		Brazier, master goldsmith (supervisor)				8.96
		(Master) jeweller				13.44
		Architect				26.89
1264	Nataraja (South Arcot)	Blacksmith, goldsmith				2.24
		Master carpenter				4.48
		Stonemason				5.45
1311	Delhi		1.75	3.00	3.00	4.50
1516–1517	Kannur		2.13	2.41	2.22	2.52
1595	Agra/Delhi		4.19	12.60	0.50	1.01
1610–1613	Golconda				5.70	

Source: Ramaswamy (2004, pp. 576–579); de Matos and Lucassen (2019, p. 125).

in the 19th century (Zwart & Lucassen, 2020). For the last part of this period of wage stagnation, that is, from the last quarter of the 19th century onwards, we have statistical evidence, systematically collected by colonial authorities. They were galvanized by the abyss between their lofty pretensions, on the one hand, and the harsh reality of apparently unavoidable famines and social unrest on the other. By critically analysing the wage series published for 1873–1912 and later wage data, Tirthankar Roy (2007, pp. 82–83) has demonstrated that low wage levels persisted for no less than one century: ‘Comparing 1873 with 1968, we observe that the average rural labourer appears to have earned a real wage that did not change very much.’⁸ Drèze and Sen (2013, p. 23, 27–33, 201–202, 291, 333) even state that ‘there was virtually no reduction of poverty, especially rural poverty, in India for most of the three decades that followed the launch of the First Five Year Plan in 1951,’ and, even after the growth in the 1980s, real agricultural wage levels stagnated again (Drèze & Sen, 2013, p. 23).

Combining all these data, we find a depressed state of rural agricultural wages that started around 1700 and lasted until recently. This has had a severe impact on a country like India, where, until very recently, the majority of its population had to earn a living in agriculture. At the same time, it highlights the extraordinary achievements in the mid-16th century and possibly later—certainly given the limited technical possibilities of those centuries.

I.2. THE PLACE AND ROLE OF WAGE LABOUR IN INDIAN SOCIETY OVER THE LAST 500 YEARS

Whatever the outcome of the rather technical but, at the same time, highly necessary discussions among economic historians, its implications for society at large depend on how many Indians drew their income from wages and to what extent. Here, we enter into two other debates, one regarding the importance (i.e., its proportion of total income) of wage labour in Indian society and the other on the relation between wage levels, on the one hand, and geographical and social mobility, on the other—a question related to the impact of mobility on economic performance. We will discuss them briefly here.

To what extent were Indians dependent on wage incomes?

This seems to be a rather factual question, which may be solved by an analysis of occupational censuses but, in reality, it is a very contentious one distorted by views on the very nature of Indian society. The orientalist view, which gained force in the 19th century, depicted India as a subcontinent dominated by self-sufficient villages and, by implication, devoid of a labour market worth this name. After influential English authors like James Mill, Karl Marx (1818–1883) wrote that India, organized ‘in small centres by the domestic union of agricultural and manufacturing pursuits [...] had brought about, since the remotest times, a social system of particular features—the so-called *village-system*, which gave to each of these small unions their independent organization and distinct life’ (Parthasarathi, 2011, pp. 7–8, 265).⁹ The famous Max Weber (1864–1920) more or less followed him in this respect (Weber, 2019). As especially Marx’s intellectual influence increased in the 20th century, also among a number of Indian academics, this interpretation of a stagnant Indian non-market economy, many centuries before British domination, gained influence.

Another influential scholar, anthropologist Karl Polanyi (1886–1968), also tended to play down the significance of markets before the Industrial Revolution. This ‘primitivist’ position spurred both debates on the nature of society in classical antiquity (with Moses I. Finley as their champion) and on ‘traditional’ non-Western societies, including India (Hall, 1994, p. 60; Lucassen, 2021; cf. Subrahmanyam, 1994, pp. 5–7). The impact of the primitivist school on classical studies on the historiography of China has been summarized by Anthony Barbieri-Low (2007, p. 27) as follows, and this is equally applicable to India.

agriculture, and not commerce, was the dominant form of activity in Greece and Rome [...] that private trade was carried out only on a minimal scale, and usually only in luxuries [...] that Roman towns and cities [...] were] parasitic centers of consumption and redistribution and not [...] productive industrial centers [...] that] individuals were most concerned with gaining status, and [that] loans and investment were not made for economic purposes. (cf. Lucassen, 2021; Subrahmanyam, 1994)

In a clear summary of this debate, Sanjay Subrahmanyam (1994, pp. 8–11, 55) writes:

In the context of colonial India, [the] hypothesis [of forced commercialization] was used to argue that commercialization was forced on the peasantry by a variety of means—some subtle and some more explicitly coercive in nature. An older ‘moral economy’—an economy underpinned by a set of mutually reinforcing and relatively ideal customs, say *jajmani*, was thus replaced by the market.

Most authors equate this brutal change with the advent of British rule in India. An alternative dating of this so-called forced commercialization is defended by Irfan Habib and others of the ‘Aligarh School’, who concede that it started already in the Mughal Empire with the excessive taxation of the rural population and its consequent immiserization.¹⁰

As Subrahmanyam (1994, p. 7; cf. Manzar, 2021, p. 301) notes, there are some major empirical problems with this primitive view of pre-colonial Indian society in the period 1100–1700. If this were true, ‘the facts of international and long-distance trade, production of both agricultural goods and manufactures for trade, extensive coinage and importation of precious metals, all have to be explained.’ He argues persuasively and extensively that Indian society in the pre-colonial period was already highly monetized and that its markets and commercial and financial instruments were rather sophisticated and therefore ends with a plea for more research into these aspects, preferably region-specific.

Whereas Subrahmanyam’s important volume of collected essays, now already nearly 30 years old, invites us to study pre-colonial India with an open eye for market forces and to look for new empirical evidence, there is still one more counterargument against the importance of wage labour that must be considered. That is the potentially inhibiting factor of caste and of the unfree nature of the lowest strata in this hierarchical system. Here, the question is not about the presence and importance of the market in society but whether these strata could participate in labour and commodity markets at all. To what degree did the lowest strata of society—the majority of its population—receive a wage, or rather

just maintenance in kind? We thus enter the contentious field of slavery and unfree labour more generally, which is very specific for India.

Although there is an initial debate about the extent of slavery in the classical sense, that is, productive workers who could be owned, bought or sold, none of the participants maintains that its significance in India comes near to that in the Americas, and especially in the Caribbean or the southern states of the USA (Campbell, 2005, 2007, 2011; Chakraborty, 2019a, 2019b; Chatterjee & Eaton, 2006; Fukazawa, 1991; Gommans, 2003; Rossum, 2021; Rossum et al., 2020; Vink, 2003). Nevertheless, to give one example, in 1818, the number of slaves in the conquered Maratha kingdom was estimated at 18,000, most of whom would have been women. Fukazawa (1991, p. 117, 120) reports for the governmental centre of Pune in 1763 some 200 female slaves employed by the Maratha government in the courts and various departments, plus some 10 of them in each aristocratic family.¹¹ As far as we know now, in the long run, a few per cent of the occupational population in India at large may have represented this type of unfree labour.¹² Most of them were women, forced to perform not only household chores but also sexual services in the dwellings of the middle classes and the well-to-do. As an outflow of the worldwide abolition movement, unfree labour was legally abolished in India in the mid-19th century (Campbell, 2005; Chakraborty, 2019b; Fukazawa, 1991, pp. 126–127; Saradamoni, 1974).

More importantly, many more working people may have been covered by forms of what has been called ‘agrestic slavery’ (Ludden, 2005, p. 93; Rossum et al., 2020; Saradamoni, 1973). It has been studied especially for Kerala, where it is supposed to have gained strength between the 8th century and the 11th century. Whatever its exact origins, it is well documented from the 16th century onwards and in particular detail for the 19th century. According to Saradamoni, there were many slave castes in Kerala, but the main were the Cherumas in Malabar and the Pulayas in Travancore (Thiruvithamkoor) and Cochin (Kochi), both of which groups performed the bulk of agricultural labour for the dominant Nambutiri Brahman caste or Nayar or Christian landlords and, indeed, under similar conditions.

According to Francis Buchanan (1762–1829), who toured the region in 1800–1801, these agrestic slaves performed any work that the master wanted them to do. Moreover, they could be ‘sold, leased and mortgaged, like the land itself, or like any cattle or thing’, as Major Walker observed in 1828 (Saradmoni, 1973, p. 375; cf. Mizushima, 1986, pp. 316–319). Not surprisingly, these agrestic slaves received no wages, merely a subsistence allowance, which, according to Buchanan, equated to two measures of paddy weekly per adult man or woman and half of that for children or the elderly. For infants, there was no allowance at all. Once a year, adults also received one cloth to wear, seven cubits (3.15 m) for a man and double that for a woman. In the neighbourhood of large towns, they took the opportunity to earn a little bit extra through wage work. Because the members of these castes were not only considered to be untouchable but also unapproachable—they had to maintain a precisely circumscribed distance from all others—domestic slavery was out of the question, and they could only toil on the land.

For this volume, it is important to know what proportion of the working population consisted of slaves in the way described here and, as such, were completely divorced from the labour market. Because this varied substantially according to regions, this question is difficult to answer in general, but for Kerala it may be regarded as tens of percentages. This caveat aside, along with Sanjay Subrahmanyam, most modern authors now agree that, at least from the 16th century onwards, India in general was characterized by a full-fledged labour market, a conclusion that is crucial for any relation between wage levels and the welfare of the common man and woman, and for the state of the economy as a whole (Lucassen, 2021; Ludden, 1988; Parthasarathi, 2011; Subrahmanyam, 1994; Roy, 2013, 2014).

The next question to be answered is the proportion of wage labourers in the occupational structure or—more precisely—which part of total income is derived from wage labour. Various studies, based on statistical data collected from the end of the 19th century onwards, suggest that between one quarter and one half of the working population depended on wages for an important or even a major part of its income. For earlier periods, this is a field that has hardly been touched, though even a limited survey of the literature reveals a number of earlier occupational and caste surveys for

several parts of India.¹³ In this volume (Chapter 6), this has been worked out in great detail for the Deccan in the first quarter of the 19th century. In this case, it turns out that only a few per cent were craftsmen and service providers in a *jajmani*-type relationship with local farmers, but even these workers may have received part of their income in cash instead of in grain (cf. Commander, 1983; Fukazawa, 1991; Kulkarni, 1996).

A related question has to do with income levels per occupational, or, for that matter, per caste category. Very rarely do we find direct information of this kind, like the list for Pondicherry town 1759, with war funds levied per caste as well as the number of heads of households taxed, which yields average amounts per household according to castes (Mizushima, 1986, p. 321). Instead, budget studies may also be useful. The earliest ones have been carried out by Francis Buchanan.¹⁴ If complete on the income side, they also inform us about the importance of wages for total household income. This is crucial information for our topic as many, if not most, rural households combined a part of their income from wages and a part of them from tilling the land as tenants of sorts (Ludden, 2005, pp. 90–93, 158). Even if wages are only a small part of a household's income, it may mean the difference between a modest living and sheer destitution. Only live-in agricultural servants—a small and, from the 19th century, diminishing part of all wage earners—would have depended solely on what their employers wanted to give them.

Given the low levels of urbanization, domestic service offered relatively few opportunities. This seems to be in contrast with the important part it takes in the literature, which devotes more attention to the rich than to the poor. The affluent Indian and colonial households could employ impressive numbers of servants, as illustrated by Fanny Parkes (1794–1875) in her memoirs about her years in North India from 1822 to 1845. Because of its details and its implications, it is worth quoting at length.¹⁵

1.2.1. The Relation between Wage Levels and Geographical and Social Mobility

We may take this overview of her staff by Fanny Parkes as a starting point for another set of questions regarding mobility (Table I.2). According to standard economic theory, people may improve their

Table I.2 A List of Private Servants in the Family

No.	Occupation	Wages ₹ per Month	No.	Occupation	Wages ₹ per Month
1	A khansama, or head man; a Musalman servant who purchases the provisions, makes the confectionary and superintends the table*	12	24	A bher-i-wala or shepherd	5
2	The abdar, or water cooler; cools the water, ices the wines and attends with them at table	8	25	A murgh-i-wala to take care of the fowls, wild ducks, quail, rabbits, guinea fowls and pigeons	4
3	The head khidmatgar; he takes charge of the plate chest and waits at table	7	26	A mali or gardener	5
4	A second khidmatgar who waits at table	6	27	A mate.	3
5	A bawarchi or cook	12	28	Another mate, or a coolie	2
6	Mate bawarchi	4	29	A gram-grinder, generally a woman who grinds the chana for the horses	2
7	Masalchi; dishwasher and torchbearer	4	30	A coachman	10
8	Dhobee or washerman	8	38	Eight sa'ises, or grooms, at ₹5 each, for eight horses	40
9	Istree wala, washerman for ironing	8	46	Eight grasscutters, at ₹3 each, for the above	24
10	A darzee or tailor	8	47	A bhishti or water carrier	5
11	A second tailor	6	48	A mate bhishti	4

(Table I.2 Continued)

(Table I.2 Continued)

No.	Occupation	Wages ₹ per Month	No.	Occupation	Wages ₹ per Month
12	An ayah or lady's maid	10	40	A Barha'i mistree, a carpenter	7
13	An under woman	6	50	Another carpenter	4
14	A doriya; a sweeper who attends to the dogs	4	52	Two coolies to throw water on the tattis	8
15	Sirdar-bearer, a Hindu servant, the head of the bearers and the keeper of the sahib's wardrobe; the keys of which are always carried in his kamarband, the folds of cloth around his waist*	8	54	Two chaukidars or watchmen	8
16	The mate-bearer; assists as valet and attends to the lamps	6	55	A durwan or gatekeeper	4
22	Six bearers to pull the pankhas** and dust the furniture	24	57	Two chaprasis, or running footmen, to carry notes and be in attendance in the veranda	10
23	A gwala or cowherd	4	57	Total ₹ per month***	290

Notes: *If your khansama and sirdar-bearer are good and honest servants, you have little or no trouble with an Indian household; but, unless you are fortunate with your head servants, there is great trouble in keeping between 50 and 60 domestics in order.

**During the hot winds, a number of extra coolies, 12 or 14, are necessary, if you have more than one thermandidote, or if you keep it going all night as well as during the day; these men, as well as the *bihishti*, are discharged when the rains set in.

***We, as quiet people, find these servants necessary. Some gentlemen for state add an *assa burdar*, the bearer of a long silver staff, and a *sonta burdar*, or *chob-dar*, who carries a silver club with a grim head on the top of it. The business of these people is to announce the arrival of company.

income by moving to employers who pay better wages for the same sort of work, or to jobs with the same or other employers that supposedly require better skills and, therefore, command higher wages. Both types of upward income and therefore often also upward social mobility may or may not involve geographical mobility. In particular, rural–urban migration is believed to offer new opportunities. For India, we must ask ourselves what the opportunities were for these types of mobilities. In the case of Parkes' household, for instance, what were the chances of entering the ranks of the household staff, and, once in, what were the chances of improving oneself in the same profession (e.g., from carpenter at ₹4/month to master carpenter at ₹7/month), or in another (e.g., from grasscutter at ₹3/month to horse groom at ₹5/month)?

Parkes seems to be pessimistic about the latter possibility. Apart from distinguishing between religions, Parkes draws our attention to the intervening obstacle of caste sensitivities.

The heat of the climate, added to the customs and prejudices of the natives; but you do not find them in food as in England. One man will not do the work of another, but says: 'I will lose caste', which caste, bye the bye, may be regained by the expenditure of a few rupees in a dinner to their friends and relatives. The Mohammadan servants pretend they shall lose caste; but, in fact, they have none: the term is only applicable to the Hindoos.

Does that mean that wage differentials are only a reflection of status without enhancing social mobility? Even if we forego the colonial prejudices of this author, we may observe a substantial differentiation between the earnings, ranging from ₹2 per month as a minimum for the unskilled, ₹3–₹4 for the low skilled, ₹5–₹8 for the skilled and ₹10–₹12 for the top wage earners. The important question, then, is whether these differences (the 'skill premium') work as an incentive for people to improve their position, or whether caste or other occupational restrictions make this illusory (as Parkes thinks is the case), and thus rob the labour market of the dynamics and advantages of social and geographical mobility attributed to it by general economic theory.

This is not the place to discuss these important questions at length but let us say a few words on what we know about the

skill premium, geographical mobility as an individual attempt at improvement and social protest as a collective alternative. For the statistical period, we see an improvement in the skill premium from the late 19th to the mid-20th century in India. According to Tirthankar Roy (2007, pp. 83–84), it increased from c. 2 in the years 1875–1895 to c. 2.3 in the years 1900–1916 and c. 3.3 in the years 1916–1937. The low ratios for the late 19th century have also been observed for North India in the 18th century, whereas before they may have been higher (Zwart & Lucassen, 2020, pp. 659–660). Thus, also for India, there might be an inverse relation between wage levels and skill premium. What this means is not immediately apparent. Therefore, also in this field, much more research is needed to explain the nature of this relation.

Reliable geographical mobility figures are available for the 19th century as far as international and long-distance migration (e.g., to the Assam tea gardens) are concerned and, to some extent, also for urbanization, but basically they start later.¹⁶ It is therefore difficult to say something more general about mobility in pre-statistical India, the period we are interested in. Certainly, examples of impressive numbers of unfree labourers and of soldiers are well known, but how to quantify mobility at large remains a problem (Rossum et al., 2020, p. 17). Instead, we will point to some analogies that might inspire future research. Four features of the 19th- and 20th-century Indian migrations stand out: they are male-dominated; they are, to a high degree, directed at advanced rural destinations in India and abroad; they are temporal and they provide extra income for the households involved, which, as we have seen, were confronted with stagnant wage levels at a very low level.

The male domination may be due to the prevalence of early marriage and patrilocality, and possibly also to the taboo on remarriage of widows, all of which made women more sedentary than men. As a consequence of the dramatic diminution of spinning as a source of extra female income in the 19th century, women in the countryside looked for local casual work, thereby replacing long-term farm servants (Roy, 2007, pp. 87–90).¹⁷ Men seeking extra income looked for temporal work on plantations both at home and abroad. This is well documented for South Indians who migrated to the straits settlements and Malaya, Burma and Ceylon, and, more recently, to the Gulf and to the booming cities within India

itself. Keen not to lose whatever small plots of land at home they were entitled to, most of them did not emigrate permanently, but returned home at regular intervals and remitted the money they could save.

In the reports of the Royal Commission on Agriculture in India (1926–1928), we find three important reasons for the dominance of temporal migrations due to inhibitions of permanent emigration of peasants.

In many cases, the hirer of land is subject to conditions, which make his status approach more closely to that of a labourer than an independent cultivator. Very frequently the holding is so small that the cultivator must supplement his income by working as a labourer. Nevertheless, with all these drawbacks, the average man will not give up a certain livelihood for the risks of pioneering in Assam or even of transferring his family from the Deccan to unoccupied tracts in Kanara or Khandesh in the same presidency [...] secondly, there is the problem of indebtedness. Most cultivators are tied to their village by their relations with the village money lender and trader, who for obvious reasons puts every obstacle he can in the way of their emigrating. Lastly, there is the important factor of ill-health. A population which suffers from such enfeebling diseases as chronic malaria and hookworm cannot be expected to display that energy which would accept, and triumph over, the risks incidental to the pioneer.¹⁸

Apart from income strategies at the household level, under certain conditions, we also see collective actions to prevent deterioration of existing wages, or sometimes also attempts at improvement. Several examples have been studied, but a good overview is still lacking.¹⁹ Sometimes, they were successful, but as long-term wage stability has shown, not to the same degree that migration was. Nevertheless, we should not make the mistake of neglecting this type of agency in Indian social and economic history, not only out of considerations of justice but also in order not to forget how difficult it is to change existing social structures.

On the other hand, the authorities were well aware of the possibilities of social unrest as a consequence of sudden price hikes for grains and other basic products. From the Delhi Sultans, the

Mughals and their successor states, we know the nerick system in which prices were kept track of locally on a daily basis. This way, governments could take pre-emptive measures. Initially, the British maintained the nerick system in the bazars next to their barracks, but at the beginning of the 19th century they became the zealots of free market politics and consequently responsible for the drama of India's malnutrition and famines (Bajekal, 1988; Blake, 1987; Habib, 1994).

I.3. OPPORTUNITIES AND PITFALLS OF THE HISTORICAL STUDY OF WAGES IN INDIA

The opportunities and pitfalls of the historical study of wages in India deserve a separate place in this Introduction because, in this respect, the several contributions are breaking new ground, in particular regarding what is generally called the 'pre-statistical period', that is, the period preceding the all-India decadal censuses, which started between 1867 and 1872, and was executed synchronously from 1881 onwards. It was only by the actual practice of taking censuses that the enumerators and analysts discovered the manifold problems associated with it (discussed extensively in the introduction to each new census report). Before the last quarter of the 19th century, 'economic data becomes scanty and is scattered around in numerous sources and regional studies, and virtually no systematic efforts have yet been made to amass the economic data available.' Roman Studer (2015, p. 15), who made this remark a few years ago, adds: 'Undoubtedly, the prime reason for this shortage of quantitative studies is the paucity of historical economic data, which is much more pronounced for India compared with European and even some other Asian countries.' Even worse, in India, 'there is a pronounced scarcity of all economic data prior to the 19th century,' more in particular 'a general shortage of non-European sources on India'.

Luckily, the situation is not that bad (for population figures, see Dyson, 2018). First, the British took several regional censuses before they attempted to cover their entire Indian empire. But Indian polities also appear to have produced much more useful data than imagined by most historians. Two major issues must be discussed here at some more length:

How to find new quantitative evidence for the pre-1870s (with an excursion on Maratha sources by way of example) and the problems of interpretation.

How to find new quantitative evidence for the pre-1870s?

In the preceding pages, we have already seen many examples of un- or understudied quantitative sources, important for the reconstruction of wages and their modalities in the pre-statistical period, even in English, the language predominantly used by professional historians of India. This will not be repeated here, but, in particular, price history and demographic history using English published and unpublished sources for especially the period c. 1760–1860 is still extremely promising.²⁰ This is even more true for three other European languages, namely Portuguese, Dutch and French, and, to a lesser degree, also Danish, German and Swedish.²¹

It might be argued—for reasons that cannot be discussed here, and in contrast to the preceding and the following centuries—that Indian society from the 5th century until the 10th–12th centuries was never really dependent on markets, nor was it deeply monetized. Consequently, historians will search to no avail for wage data in this era (Lucassen, 2021). It should be noticed that this produces a striking parallel with most of contemporaneous Europe. This is not to say, of course, that, in both cases, those centuries are not interesting for economic historians,²² but for this volume on the history of wages we must start later: from the deeply monetized Chola Empire in the South, and from the times of the Delhi Sultanate in the North. The available quantitative evidence has been presented in the first section of this Introduction and we hope that more will become available in the future. Apart from hard wage data for the period between c. 1000 and 1500, of course, qualitative information is also important. A good example is provided by the *Lekhapaddhati*, which, while technically concerned with epistolary style, is very important in terms of the information that it provides on the commercial world of the Indian Ocean before 1500 and the involvement of Gujaratis in it, as well as on other aspects of market systems. The 2007 translation of the text by Pushpa Prasad (2007) is of great value in understanding the range of, in particular, economic and administrative activities of the time (cf. Palat, 2015).

While such information is undoubtedly important for fleshing out our knowledge about commercial transactions in pre-colonial India, there is also no denying that the *Lekhapaddhati* does not easily lend itself to statistical analysis. Information from one region or one set of sources can often not be compared with that of another, with the result that there is frequently a dynastic/regional focus rather than a broader one. In addition, such sources usually do not have information that can be used to build an understanding of the actual wages, even while they provide considerable information on workers, work and areas of work, as well as on the social aspects, particularly that of caste.

When we move to the 16th and 17th centuries, information becomes much more widely available. Some of this is undoubtedly due to the increasing number of European language sources on South Asia; but what is often neglected is the Indian language sources, including those in Arabic and Persian.²³ The Mughals in particular kept detailed records, and for the late 17th and 18th centuries, we have a wealth of documentation from especially Rajasthan and Maharashtra. Given the limited space in this Introduction, we will work out one example more fully.

1.3.1. By Way of Example: Marathi Sources

The Marathi sources are of tremendous importance. Written in Marathi in the *Modi* script²⁴ (a script that was used through the late 17th century to the early 20th century), they contain a wealth of information. Many of the documents to be found in the Peshwa Daftar in Pune, in the Bharat Itihas Sanshodhak Mandal (BISM) in Pune, in the Sitamau Archives in Madhya Pradesh and the Saraswathi Mahal Library in Thanjavur, all contain collections of *Modi* records. The Peshwa Daftar alone has an immense collection of over 1 crore documents, many very cursorily catalogued, most unpublished and many hardly noticed, let alone studied, by researchers. In the main, these are records of state revenue. Known as *taleband*, they are account papers, detailing income collected under different headings, and the expenditure of the state under various categories, including salaries. A set of documents from the province of Vijaydurg, one of the key sea forts of the Marathas, has account papers known as *zadati*, which give details of naval

administration (Apte, 1973, p. 245). Some of the *Modi* documents have been studied in the papers by Rekha Ranade, Surendra Arjun Shirsat and Anjali Soitkar Vekhande (Chapters 3, 4, 5 in this volume). In his work on agrarian conditions, T. T. Mahajan (1991, p. 57) gives some information on wages from both the account from 1672–1674 by the French traveller Abbe Carré and from Marathi sources.²⁵ This information may be compared with that given in the papers on Shirsat and Soitkar to compute the change in wages (if any) over a century.

Other kinds of information can also be gleaned from the documents. For example, one set of documents relating to the city of Pune, dated to 1765, gives information about the cost of repairing houses in one of the key parts of the city, including the names of the owners of the houses and their occupations. Late 18th-century documents give us fascinating glimpses of inter-village conflict over boundaries—something that apparently became much more important in the context of extending the land under cultivation. At one level, this challenges the notion that the 18th century saw stagnation and decline in the agricultural sector all across the subcontinent; at another, it is a window into issues of rights and ownership. B. K. Apte (1973) used the documents available in the Peshwa Daftar to discuss aspects of the Maratha Navy; what is important for us is the information that he provides on prices of goods required for the ships, as well as some information on cost of some products. Some information on wages is also provided. For example, one document, which talks of a projected expedition against the Portuguese in 1771–1772, 100 soldiers were recruited at the rate of ₹5,736 per soldier, and 100 sailors at the rate of ₹6,480 per soldier (Apte, 1973, p. 249). A sum of ₹10,000 was asked from the state to pay for replacement of cordage on some of the older ships, and as new ships were being built, the total expenditure on these new ships (for iron, planks, cotton and labour) was ₹17,000. One document talks of the replacing of docks and of hiring four carpenters for the work; unfortunately, the hiring charges have not been given. In one instance, mention is made of divers appointed to maintain the depth at the docks during the monsoon, and ‘to enable them to have enough heat in the body a total allowance of ₹3,150 per month was sanctioned’ (Apte, 1973, p. 261). Some payment was made to widows and children of sailors who had lost their lives

at sea, or in the service of the state. Apte (1973, p. 251) mentions specifically those who died in an engagement against the British, those who died as prisoners of the Siddis and those who drowned in shipwrecks. As we said, many of these documents have been un- or underutilized, and these can be examined afresh for a better understanding of wages and prices in the 18th century.

While we have talked at fair length about the documents in the Peshwa Daftar, we should also state that these are far from being the only collections. The BISM has a large collection of mostly family papers, including those of some of the major banking families of the 18th century. These, too, have been utilized more from the perspective of a better understanding of Maratha history, but could be useful in acquiring more knowledge about the economy of the period, and of the role of such banking families in the fiscal transactions of the time. There are also family papers in the Sitamau Archives; some, such as the *Hingne Daftar* and the *Gulgule Daftar*, have been fairly extensively used to trace the families' histories and their role in the political movements of the 18th century, but, as with the BISM collection, these too remain a largely untapped source for the study of economic aspects. The Saraswathi Mahal Library in Thanjavur is a collection that records the activities of the Maratha kingdom of Thanjavur; the collection has been a rich cultural resource, containing, as it does, material on music, dance, the collections of the Maratha king Serfoji II, known for his interest in subjects as diverse as geography, astronomy and medicine; but the *Modi* documents are only now beginning to be scrutinized, and, as yet, the range of information that they may yield remains uncertain.

Archival sources in Rajasthan can also provide different kinds of information. As with the Marathi sources, these too consist of a variety of documents, including letters, petitions, tax orders and Mughal *farmans*, in Rajasthani, Urdu and Persian. The Bikaner State Archives has published a guide to their archives in 1992, which includes a list of family and business records. Rajasthani and Persian records of the 18th and 19th centuries that are to be found here provide information on revenue collection but would be of value for future research.²⁶ Madhavi Bajekal (1988, p. 451) has used the *Daftar Diwan Hazuri* from the Jaipur Records Section of the Bikaner archives to study grain prices in eastern Rajasthan and has used these records extensively in her thesis on agricultural

production (Bajekal, 1990, Ch. VII). However, as with the Marathi sources, there is much more that can be done. The continued importance of trade, and role of traders in the economy, is one aspect that can be taken further, as too a fresh look at the *arzdashts*, the petitions that were made to the courts for different issues.²⁷

At Jodhpur, the Rajasthan Oriental Research Institute and the Maharaja Man Singh Pustak Prakash Research Centre contain documents in Rajasthani and Sanskrit, including some *dastur-ul-amals*—manuals of revenue collection, giving details about the collections from various sources (Thelen, 2019). Such *dastur-ul-amals* are also to be found in Maulana Abdul Kalam Azad Arabic Persian Research Institute in Tonk, yet another collection that would be worth exploring. As in many of these cases, these documents have so far been more for social and political history, rather than for economic history. Finally, let us not forget Marathi documents in *Modi* script in the ‘colonial archives’, as attested by the large collection of village community records in the Goa State Archives, only partially written in Portuguese.

1.3.2. Problems of Interpretation

There are numerous interpretation problems in the study of wages in India before the end of the 19th century, of which we want to concisely discuss the following three: occupation and caste; gender, age and the household economy and modalities of payment.

Wages are specific for different occupations and therefore economic historians are always wrestling with how to classify them, in particular if used for international comparisons.²⁸ Peculiar to India is that the sources use occupations such as ‘carpenter’ or ‘coolie’ as well as caste names. In theory, the relation between the two is obvious, but in practice it is not, as stressed by many authors in this volume.

Moreover, regional names and variations need to be constantly kept in mind. For example, 17th-century English and Dutch records for the Coromandel Coast mention Chettis, while those dealing with Gujarat (particularly Surat) talk of Banias and ‘Moors’. Nevertheless, it is likely that the same occupational category is meant.²⁹ Weaving castes are often not named, but there is mention in the late 17th century of the ‘Janrawar’ caste of weavers, a

name that we do not find earlier than this period. Other occupations mentioned in the European records include ‘muckwaes’—a corruption of *machua*, meaning fishermen, but the local variants of this word (*koli*, for example, which is used on the Konkan coast) are not to be found. A term used in the Coromandel region for a messenger was *pattamar*, again, something that is not found for other regions (Seshan, 2012).

More in particular—and this goes not only for India—it is not always easy to envisage by which types of work and under what conditions the majority of the population, that is, those working in agriculture, made a living. For Mughal times, Siddiqi makes a useful distinction between those actually working and tilling the land and those who owned the land and paid revenues to government. The former, in the Persian sources called *mazara*, *asami* or *riaya* (*ryot* in English sources), ‘regardless of his having enjoyed or not enjoyed occupancy rights, did not have the right either to sell or mortgage the land tilled by him’. Nevertheless, they had to pay anything from one-third to one-half of the produce to the *muqadams* or *zamindars*, who, in turn, paid part of it, by way of land revenue, to the government.³⁰ However, for the student of wages, the work now only begins, because within this broad layer of peasants or ryots there are numerous variations. The most important are related to the basic truth that the majority of peasant households lacked sufficient land to make a proper living and, consequently, had to look for supplementary sources of income, mainly by way of cottage industries or wage work locally, or (for men) elsewhere in seasonal agricultural work or as soldiers. In the 19th century, big infrastructural works opened new opportunities and finally also industrial work.³¹

Here, we enter the realm of the household economy, the basic income-pooling and consumption unit, in which all members used their mutual entitlements. Like all other issues discussed here, this is a global phenomenon for which budget studies are crucial, as we have seen, but, at the same time, with many Indian specificities, of which seasonality and restrictions posed by caste, gender and age are the most important ones.

There is a substantial difference in the seasonality of agricultural and other kinds of work between North India and South India.

Whereas in the South regular rains permit nearly continuous cultivation, in the North, it is generally estimated that only half a year is needed for such activities. This leaves a lot of time, but for the (small) peasants also the necessity to look out for other activities.³² Not all household members, however, were able to participate fully in all kinds of activities.

The most visible were restrictions for women. Because of their early age at marriage (generally between 10 and 12) and the virtual impossibility of remarriage, almost all female labour was performed within the husband's household, that is, that of her father-in-law, and, in a later phase of the life cycle, that of her husband and, finally, her son. But there were more restrictions, especially for the middling and higher castes, who did not permit outdoor work for their womenfolk in the fields or elsewhere. According to the reports of the Royal Commission on Agriculture in India (1926–1928), this taboo was especially detrimental for the income of the middling castes, as the lower ones did not maintain such restrictions.³³ In particular, home spinning lost much of its income-generating potential due to, as we have seen, the massive importation of machine thread from England in the 19th century.

Apart from restrictions on female labour as such, women also received lower wages than men. This is a global phenomenon, but, surprisingly, the so-called gender wage gap in India may have been less extreme than in Europe, as suggested for Bengal in the 18th and early 19th centuries (Zwart & Lucassen, 2020, pp. 662–663). By implication, women's earning capacities might be more important for the household budget, especially of the poorest families in India. All contributions to this volume add evidence to this question, but it is too early to corroborate or deny this assertion. At the end of the 19th century, civil servants and academics engaged in famine relief took a special interest in the work and remunerations of women, trying to find 'objective' criteria in order to determine gendered food requirements and performance. One of the problems they encountered was the close cooperation of husband and wife, which made it virtually impossible to distinguish each other's contribution to the task wages paid to them (see Chapter 8 by Amal Shahid; Jha, 2020).

Finally, modes of payment also matter for the actual spending of wages earned. Here, we must distinguish between wages in cash

and in kind, between time, piece and task wages, between individual and collective payment and between different frequencies of payment, linked to questions of advances and indebtedness.³⁴ The distinction between payment in kind or in cash matters greatly in times of highly fluctuating grain prices. If paid out in kind, the agricultural labourer is saved from market vicissitudes, but we see that often in times of high grain prices employers shift to cash payments and vice versa (see Chapter 6 in this volume; Keatinge, 1912, p. 67, 71–72; and the Royal Commission on Agriculture in India, 1926–1928). The choice between time and piece or task wages matters not only for the relation between remuneration and performance but also for the need and intensity of supervision—it is more important in the case of time than that of piece or task work, where, in the end, only the amount and quality have to be assessed (Lucassen, 2007; cf. Keatinge, 1912, p. 77).

All 19th- and 20th-century observers of Indian labour agree on the relation between frequencies of payment and the problems caused by advances and indebtedness.³⁵ Advances have been well documented from the 17th century in the case of weavers. As long as the expected production was not lower than the sum of the advanced money, nothing was wrong. To the contrary, the capability of weavers to command an advance, or even to play off merchants against each other, may be seen as proof of labour power (Parthasarathi, 1998, 2001). When, however, workers accepted advances from employers or moneylenders, they could not be expected to pay back through their work, they lost their freedom, as we have already seen in the discussion on mobility. The eminent agricultural economist and sociologist Radhakamal Mukherjee (1889–1968) was very explicit in his report and oral testimony in 1927 for the Royal Commission on Agriculture.³⁶

Such is the custom of the country in many parts of India that the zamindars, malguzars or ordinary cultivator nearly always contributes to get his servant into debt, and thus obtain a powerful hold over him which extends even to his posterity. Agrarian serfdom is more discernible in those parts of India where the number of the lower and depressed orders is the largest. Bombay, Madras, Malabar, Cochin, the Central provinces, Berar and Chota Nagpur show the largest aboriginal

population, and it is in these areas that the status of the agricultural labourer verges on slavery. The ethnic composition of the village, which governs the social stratification, is thus responsible for the survival of slavery.

The less frequent the wage payments, the more the need to bridge the period without income, and the more likely that a worker had to borrow money. Employers who wanted to be sure of the permanent availability of cheap labour could thus seduce workers to accept money, especially in times of dearth or famine, or on the occasion of weddings or other festivities, which required more money than a worker or small peasant could have saved. This problem was aggravated by the exceedingly high interest rates that could be enforced. We lack a clear picture of the incidence of advances outside the textile industry for the period this volume is concentrating on, as we do for the frequency of disbursement of wages, but it is clear that such information is also crucial for workers' net income and the possibilities to improve it.

A final and perhaps unexpected problem of interpretation arises from all the misery and abuse that we have detailed in this methodological paragraph. Without romanticizing the life of the working woman, man or child, we are therefore at risk of missing part of the full picture—the warmth of human relations that also is part and parcel of work. Rabindranath Tagore, no doubt himself a member of the upper class and not totally free of its prejudices, has nevertheless attempted to catch another aspect of the life of the labouring poor in a poem about the seasonal brickmaker families in Bengal, hailing from somewhere in the United Provinces ('Big Sister', written in 1896).

I.4. INTRODUCTION TO THE SEPARATE CHAPTERS

The chapters collected in this volume are of immense importance in the ground that they break, both in the sources and the regions selected. They have been organized in chronological order, but most of them deal with Western India and the Deccan. This is a path-breaking exercise, for the sources used by the authors are absolutely new and unutilized by earlier scholarship.

Hélder Carvalhal, Paulo Teodoro de Matos and Jan Lucassen (Chapter 1) examine newly discovered Portuguese sources to draw

a picture of wages and living conditions in the Portuguese territories of Western India in the 16th century. As they point out, this is a crucial century in India's history, seeing, as it does, the consolidation of the Mughal Empire under Akbar in the North, and the establishment of direct maritime contacts between India and Europe. Divided into three broad sections, the chapter first analyses the data, arguing for a substantial real wage hike in the 1540s, and then moving on to a broader analysis, to locate India within the global framework.

Continuing the theme of Europeans in pre-colonial India, Radhika Seshan (Chapter 2) looks at the English in Fort St. George/Madras in the late 17th century. Concentrating on a smaller time span in comparison to Chapter 1, she examines the wages paid to various officials, both European and Indian, who were employed in and around the English settlement. However, the chapter brings out some previously opaque aspects in terms of the connections between prices and wages, so that, in addition to information about the settlement itself, the special rates for travel out of the city are also included.

With Rekha Ranade's paper (Chapter 3), we move into the first of three chapters dealing with Maharashtra in the 18th and 19th centuries. Based on previously unpublished sources, this chapter examines some of the *Modi* documents that point to the existence of a well-organized fiscal system and of the circulation of money within the Maratha kingdom and beyond through bills of exchange (*hundis* and *varats*). Wages in both cash and kind are also highlighted in the course of the chapter, with details about the timing of payments (monthly/daily) and their form (cash or kind, or a combination of the two).

Surendra Arjun Shirsat (Chapter 4) continues the focus on 18th-century Maharashtra but takes a smaller unit—the Pune *prant* or province. Again, through previously unpublished material, he studies the expenditure and income of the state and argues that the major expenditure of the state was on wages to various officials. Details of the wages, as well as the changes in these wages at the same level of the bureaucracy, are tracked. Particularly interesting are the details about the female slaves/servants employed at the forts and the payments they received.

Anjali Soitkar (Chapter 5) takes up another, smaller region within 18th-century Maharashtra, the area known as Sinnar *par-gana* (a sub-unit of a *prant*), near the larger city of Nashik. Again, details of the revenue collected in the region have been highlighted, along with some details of the expenditure, particularly on salaries. All three of these chapters give both an indication of the range of material available in Marathi and the centrality of the state in the economy of the time.

Jan Lucassen (Chapter 6) goes into the 19th century and the beginnings of the colonial rule. Studying the period immediately after the defeat of the Peshwas in 1818, at the time of the existence of what was known as the 'Deccan Commissionerate', he specifically examines one of those appointed to study the region—William Henry Sykes. Sykes' report provides a wealth of information on population, village-level data, sex ratios, castes, urban and rural areas and their population, occupations, and taxation and income generated from that. Most important are his reconstructions of the wage-earning population. An immensely detailed report, the chapter emphasizes the range of information that is available from such early reports, and it would be helpful if, in future, a comparison were made of the kind of information available in the reports of the other commissioners who were appointed at the same time, particularly Pringle (Hatekar, 1996; cf. Kulkarni, 1989).

Dhiraj Kumar Nite (Chapter 7) takes us a little later into colonial times by looking at the wages of construction workers in the Deccan in the 1860s. He demonstrates that while construction workers saw improvements in real income in this period, the increase still fell far short of their requirements. The gap between need and income was sought to be filled by increasing the total family labour offered at the market; clear from his data is that women and children were paid substantially less for the same work. Here, perhaps, we can draw a comparison with something that Vijaya Ramaswamy (2000) pointed out, when she collected the songs of women working in the fields—one of the songs clearly talks about the difference in pay.

The last chapter in the volume by Amal Shahid (Chapter 8) takes us to a different geographical region—the United Provinces. Focusing on the issue of famines and famine labour, Amal Shahid

highlights both the prevalence of famines and the ways in which the colonial state brought in famine-related ‘relief measures’ in the form of public works. The analysis of wage payments and the work undertaken clearly foregrounds the idea that famine relief wages were predicated on aims to regulate productivity under the colonial state, as well as notions of ‘efficiency’ and ‘waste’ of labour.

All these chapters have brought together a variety of sources that help us to flesh out the arguments, expounded at the beginning of this Introduction, of India’s lack of representation in the Great Divergence debate, which spans the pre-colonial and the colonial period. We are beginning to identify not just the areas where some of the existing theories can be challenged but also the sources that can be used in order to continue the debate meaningfully. It is with these ideas in mind that we chose to add references to each chapter, with details of both primary sources and additional readings, to help scholars who wish to research more into these aspects. For the same reason, we have also included glossaries in specific chapters.

NOTES

1. The emphasis varies according to culture and periods. For Spaniards in the Philippines and the Portuguese in Asia, for example, the spread of Christianity was a priority; for the Dutch in Asia, it was far less important.
2. For the continuing debate on China’s Great Divergence, see Deng and O’Brien (2016) and O’Brien (2020).
3. It should be underlined that wage developments in this debate are conceived as long-term trends, leaving aside short-term hikes, including famines and concomitant high prices of bread grains.
4. Remarkably, Manzar (2021, Chapter 3 for food, clothing and housing prices, Chapter 4 for wages, appendices A–D), while discussing wages in English and Persian sources, does not refer to the Great Divergence Debate.
5. It is not clear to us to what extent Mizushima’s urban wage data (1986, pp. 310–319) for Madras 1733–1759 and Pondicherry 1743–1760 support Parthasarathi’s conclusions, as he (1998, p. 158, fn 20) quotes only Mizushima’s prices.
6. These trends run parallel to the latest population estimates for India, which suggest a slowing down of population growth in the 18th century as compared to the 17th century (our interpretation of Dyson, 2018, Chapter 5).

7. Not used in de Matos and Lucassen (2021). An extensive study about the price history and market regulations of the Chola Empire in especially the 11th century does mention shops and bazaars, as well as ‘those who work for hire’, ‘plowmen’ and ‘employees’ of market authorities (such as clerks, accountants, overseers, sweepers, policemen and market officials), but unfortunately does not provide a single wage notation (Hall, 1994, esp. 70).
8. For newly discovered industrial wages in the 1920s, see also Linden et al. (2020).
9. He quotes from Marx’s article ‘The British Rule in India’ (1853).
10. For earlier persuasive arguments, see Blake (1987) and Ludden (1988).
11. Governmental slaves were paid annual wages, which could eventually turn into savings that enabled them to buy their freedom. Clearly, female slaves employed inside the courts could not belong to an untouchable caste but, beyond this, they could hail from any other caste, except the Brahmin (cf. Shirgaonkar, 2010, Ch. 5, esp. 110; Roy, 2006, p. 65).
12. This is a very rough estimate, waiting for many regional quantitative studies. Furthermore, this is not to deny the large numbers of Indian slaves, exported overseas and across the Hindu Kush (Levi, 2002; Van Rossum, 2021; Van Rossum et al., 2020; Vink, 2003).
13. A few examples: Mizushima (1986, p. 321) for Pondicherry town 1759; Ludden (1988) for Tirunelveli 1823 and Boileau (1837, pp. 223–262) for many towns in Rajasthan and western adjacent regions 1835 (see also Roy, 2006, pp. 221–226 for castes and occupations of Jaipur), examples to be multiplied as the proto-statistical period progresses.
14. For him, see, for example, Van Schendel (1992) and Sivramkrishna (2009). We do not know of a comprehensive overview of Buchanan’s or other early household budgets in India. Later, they become an important tool for advocates of improvement. Lots of information may be found in Keatinge (1912), the Royal Commission on Agriculture in India (1926–1928, 1928 [abridged report]) and Maharashtra Provincial Congress Committee (1936); for industrial labourers, see Linden et al. (2020, pp. 105–111, 155–156, 131, 147–150).
15. Parkes (1850, Vol. I, pp. 209–211), not used by Zwart and Lucassen (2020); cf. Chakraborty (2019b).
16. Here, we will only refer to a number of modern studies as they cover much of the earlier literature: Haynes and Roy (1999), Denault (2009), Amrit (2011, 2013, 2014), Ramaswamy (2014) and Tumbe (2012, 2018).
17. Of course, we have to realize that patrilocality involves exogamy and one-time, short-distance, rural-to-rural migration by women (Tumbe, 2018, pp. 34–35).

18. Royal Commission on Agriculture Vol. IV, Part II, pp. 581–583; cf. Vol II., Part II, 187; Vol. VII, 397–398.
19. Some early examples: Parthasarathi (1998, 2016) for South Indian weavers in the 18th century; Sengupta (2016) for construction workers in Calcutta 1758–1761; Lucassen (2012) for gunpowder makers at Ichapur c. 1790–1810; Lucassen (2007) for brickmakers at the Ganges Canal 1848–1849.
20. Apart from some of the contributions to this volume, which testify to this, we would like to point to Misra (2014) and Yazdani (2017).
21. A few examples: for Portuguese, see the first contribution to this volume, and de Matos and Lucassen (2019, 2020); for Dutch, see Zwart and Lucassen (2020) and Van Rossum et al. (2020); for French, see the works of, for example, Mizushima (1986) and Koboyashi (2020); for French and German, see Yazdani (2017); for Swedish, see the contribution by Dhiraj Kumar Nite to this volume and af Geijerstam (2004).
22. For the Chalukyas, see, for example, Padigar (2010); for the Palas and the Senas, see Pal (2019) and Ghosh (2005).
23. Here, we will simply refer to the important work of the so-called Aligarh School, see, for example, wage data discussed above in Habib (1994) and Haider (2004, 2007, 2010).
24. *Modi* is a script, not a language, as the language is usually Marathi; it has sometimes been compared to cursive writing in English. However, there are also documents that are in Gujarati language and *Modi* script, and it has been suggested that this form of writing spread in all the areas of the Maratha kingdom in the 18th century. Used extensively between the 17th century and the 19th century for documenting administrative affairs, it was officially given up in 1950, in favour of the Devanagari font. For a survey, see Kulkarni et al. (2014).
25. His reference, though, is not clear. As to the abbé, he paid his own coolies (eight of them) ‘three rupees each, which is one and a half ecus, to take me to Bijapur, without being obliged to give them any food’ (M. E. Fawcett & C. Fawcett, 1947, p. 226).
26. These archives have been used by Singh (1990) for his study of agricultural production of Rajasthan in the second half of the 18th century.
27. For the Mughal period of Jaipur, important so-far untapped sources are also available in the Marathi/*Modi* collections at Sitamau.
28. For this purpose, the taxonomy of HISCLASS has been developed, see Zwart and Lucassen (2020).
29. Records of Fort St. George for various years; also the Foster edited series, *The English Factories in India*.

30. Siddiqi (1970, pp. 10–20; cf. Ludden 2005). In his testimony before the Royal Commission on Agriculture in India (1926–1928, Vol III, p. 322), George Paddison, the Commissioner of Labour at Madras, warns us against misinterpreting the number of landowners, tenants or labourers in the census:
The figures are there, but they must be taken with a grain of salt as socially the position of a tenant or a landowner is so much higher that people are inclined to put themselves down as such when for practical purposes they are agricultural labourers.
31. See Chapter 6 by Lucassen and Chapter 7 by Nite in this volume; for soldiering: Kolff (1990) and Yazdani (2017).
32. Extensively documented in the reports of the Royal Commission on Agriculture in India (1926–1928). See also Parthasarathi (1998, p. 89).
33. For example, Royal Commission on Agriculture in India (1926–1928, Vol. II, Part II, p. 186; Vol. IV, p. 341). Religious restrictions occurred, especially against poultry and certain kinds of silkworm breeding (Vol. II, Part I, p. 377, 565; Vol. II, Part II, p. 185).
34. Many examples of time, piece and task wages around 1600, as well of advances to textile workers in the 17th century in Manzar (2021, Ch. 4).
35. The frequency of wage payments is a neglected topic of research. For the emerging industry in India, it was mostly fortnightly or monthly (Linden et al., 2020, p. 56, 121, 137), but what the prevalent frequency in agriculture was is unclear.
36. Royal Commission on Agriculture in India (1926–1928, Vol. VII, pp. 368–422, esp. p. 389, 393–396; quotation from pp. 393–394; cf. Vol. III, p. 314 for Madras; Ludden, 2005).

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WAGES, INCOME AND LIVING STANDARDS IN WESTERN INDIA, 1510–1570*

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1.1. INTRODUCTION

This chapter examines wage and income development and its effects on living standards in 16th-century Western India, for which there were no wages known prior to those recorded in the *Ain-i-Akbari* (c. 1595). The 16th century is particularly important because India underwent a great institutional renaissance during the rule of the Sur dynasty, and later under Akbar, the greatest of all Mughal emperors. It is also the century in which intensive maritime contacts between Europe and Asia were established.

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This study aims to integrate Western India in a wider global discussion about welfare and living standards in South Asia, the so-called Great Divergence debate. We will demonstrate that there was an increase in both nominal and real wages of unskilled Indian labourers along the Indian West Coast from 1510 to 1570 (particularly around the middle of the 16th century), and we will link this to the epochal change that took place in India in that period.

After a thorough discussion of hitherto unused Portuguese-language sources regarding the economical and occupational structure of Portuguese India, and of the appropriate methodologies to adopt (grouping the available data into three sub-periods: 1510–1526, 1527–1544 and 1545–1570), we will proceed as follows: first, we will analyse the degree of integration of labour market by comparing prices and wages in three different Western Indian coastal regions: the North-West, the Centre and the South-West. Second, we will assess the nominal and real wages paid to both European and non-European workers in the period 1510–1570. This assessment will concentrate on daily income for the sub-periods of 1510–1526 and 1545–1570, for which we have the most data, and it will also attempt to include the intermediate years 1527–1544, for which evidence is very wanting (though not totally absent). In a concluding section, we will try to frame the results, both regional and temporal, in a broader framework of Indian socio-economic history, as well as India's place in global history (Allen, 2007; Allen et al., 2012; Broadberry & Gupta, 2006; Broadberry et al., 2015; Parthasarathi, 2011).

1.2. INDIA IN THE GREAT DIVERGENCE DEBATE

Until recently, wage developments in India before the 1590s were a total enigma. Except for some scattered data for Delhi in the 14th century, none other seemed to have been preserved. That is disappointing for two reasons. First, it complicates and even impedes the writing of the history of income and well-being in those three centuries in which the Delhi Sultanate reached its apogee and subsequently declined, the Sur dynasty rose and, finally, the Mughal Empire was restored. Second, it nearly excludes India from the debates on economic performance in Eurasia as a whole (Allen, 2007, p. 13). Fortunately, there is hope now with new research and debate, at least for the 16th century, as a plethora of Portuguese sources, so far untapped, appears to be available.

A first article using these sources was published by de Matos and Lucassen (2019).¹ It discussed wages in Kannur on the south-western coast of India in the years 1516–1517 and demonstrates the feasibility of the topic. It is also the first attempt to bridge an enormous gap of nearly three centuries between 1300 and the 1590s. Most of all, this study demonstrated low wage levels around 1300 in Northern India and again around 1510 in Southern India, thus suggesting that wages must have risen substantially in the course of the 16th century until the 1590s.

Most participants in the Great Divergence debate consider that India's economic and cultural achievements at that time were on a par with Western Europe and China. Recent research suggests that this lasted for about a century. That was when the Great Divergence may have happened as far as India was concerned. In a recent article, de Zwart and Lucassen (2020) argued for a decline of the income paid to Indian workers in Northern India and a subsequent decrease in living standards from the late 17th century onwards. It implies that India had already started to diverge from Europe before the 18th century.

Our study goes back to the 16th century by asking when this long period of high achievements started: was it just before the end of the 16th century, thus reducing India's golden age to barely one century? Or did it start much earlier, spanning one-and-a-half century or more? So far, the debate has been hindered by the paucity of sources making it difficult for scholars experienced in providing solid sets of quantitative data to support their claims. This chapter will attempt to overcome this obstacle by providing and analysing a new data set based on Portuguese evidence for a number of locations in Western coastal India. The data set covers a wide area, from north to south, and has been constructed in such a way that it can be linked to earlier and later sources, thus allowing comparisons across time and space.

1.3. THE ESTADO DA INDIA

Our sources relate to 11 Portuguese settlements that were established on the western coast of India between 1503 (Kochi) and 1559 (Daman) in what was known as the Portuguese 'state of India' (*Estado da Índia*). Following Vasco da Gama's first landing in southern India in 1498, the Portuguese navigators gradually moved northwards and acquired commercial and territorial

concessions from Indian sovereigns or—increasingly—took them by force. This way, they established fortified settlements in Kochi, Kannur, Kollam and Calicut (between 1503 and 1513), Goa (1510) and then in what they were going to call the ‘northern province’: Chaul, Bassein (respectively south and north of modern Mumbai), and Daman and Diu (between 1521 and 1559).

Portugal had officially established its state of India by 1505, with D. Francisco de Almeida appointed as the first viceroy (1505–1509). These settlements then became part of a unified political structure under the Portuguese crown, though their Indian contemporaries may not have seen it in that Luso-centric way. For Portugal, the *Estado* extended far beyond India, which will be our focal point. Apart from the East African coast, and following Portugal’s conquest of Goa (1510), Melaka (1511) and Hormuz (1515) during the government of Afonso de Albuquerque

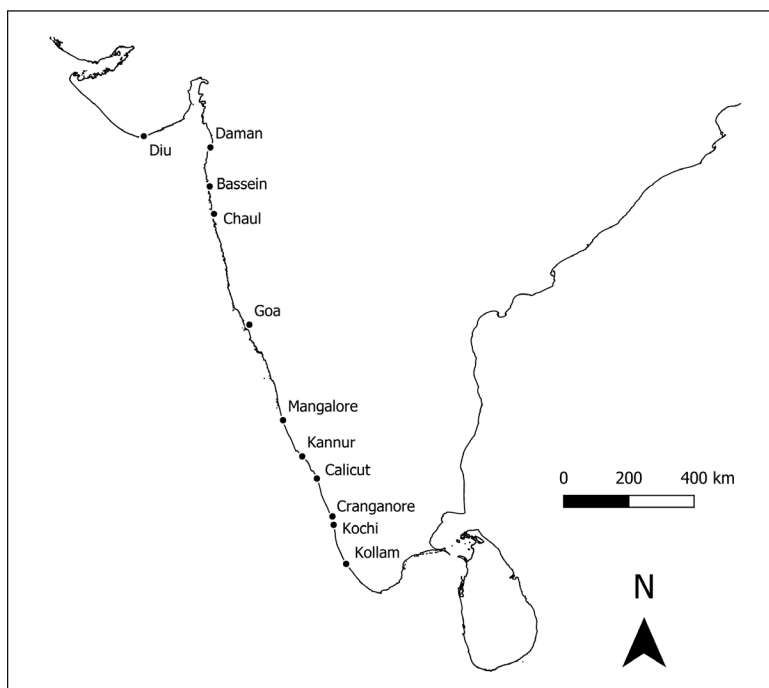


Figure 1.1 Main Portuguese Settlements in Western India, c. 1560²

Source: The authors.

(1509–1515), the Portuguese also established themselves in Ceylon (1597), Timor (1596) and Macao in China (1557). For practical reasons, we end this chapter in 1570, by which time, according to Sanjay Subrahmanyam ([1993]2012, p. 113), ‘the Portuguese had a presence in almost every region of Asia that they were to penetrate in the course of the sixteenth and seventeenth centuries.’³

The term ‘state of India’ was perhaps something of a misnomer. As Luís Filipe Thomaz ([1994]1998, p. 207) notes, it was not a well-defined geographic area, being essentially a group of ‘territories, properties and establishments of the Portuguese Crown in [the region of] the Indian Ocean and adjacent seas’. That meant that there was a ‘minimum degree of effective territoriality and a maximum degree of geographical dispersion’ ([1994]1998, p. 210).⁴ The political entity was a network of areas rather than a unified space, and it was mostly sustained by the circulation of goods and commodities rather than production. It was made viable by military and naval force—under the *cartazes* policy, a Portuguese fleet (*armada*) patrolled territorial waters, sinking or seizing vessels that entered without the requisite authorization.⁵ On land, forts (or *fortalezas*) were constructed at strategic locations where trading routes converged, and they were established as hubs of supply, communications and naval repairs.

Although the Portuguese territorial ‘possessions’ on the Western Coast of India were nominally part of a unified political structure, they were subject to different legal regimes. In some, predominantly rural areas, such as Goa and Bassein, the Portuguese exercised effective legal sovereignty. That was not, however, the case in areas that were occupied in accordance with peace treaties entered into with Indian sovereigns or as protectorates (Thomaz, [1994]1998, p. 225).

1.4. THE ECONOMIC AND OCCUPATIONAL STRUCTURE OF PORTUGUESE INDIA IN OUR PERIOD

In terms of physical structure, many of the occupied areas were essentially a hybrid combination of fortress (*fortaleza*) and factory (*feitoria*), which protected settlers and their trading routes. These settlements occupied a very small fraction of the total territory of India and, in geographical terms, differed considerably. Basically,

they were small, isolated territories connected by sea rather than by land. Only three of the settlements included a significant area of rural land which (at least in principle) guaranteed a food supply to the local population: Goa (comprising the islands of Goa, Bardez and Salcete, with a total area of 712 sq. km), Bassein and Daman, both belonging to the Northern province (*Província do Norte*). All the others were almost entirely dependent on supplies imported by sea (Disney, 2009, p. 2, 146).

The state of India was predominantly urban in character as relatively few of its settlements had any significant area of agricultural land with a rural population. Therefore, most of its inhabitants were concentrated in port towns and cities, which were relatively well fortified but had little or no control over the respective hinterlands. Goa, Diu and Chaul were most densely populated, though the demographic proportion of European/Christian settlers was negligible during the first half of the 16th century.⁶

The economic life of the state was centred on the *feitorias*, primarily used for the intra-Asian trade and for shipping products to Europe via the 'India Run' (*Carreira da Índia*)—the trade route from Portugal to India. Commerce was the lifeblood of these territories, including the lucrative spice trade, especially of pepper, over which the Portuguese Crown tried to maintain a monopoly.⁷ The *feitorias* were also the centres of revenue collection for the Crown. They were under the command of the captain of the local fort, who held broad civil and military powers under the *Regimento* (Statute). These officers established the rules for administrative, fiscal, judicial, military and ecclesiastical jurisdiction. Most of the administrative positions and functions at the forts and *feitorias* were held by Portuguese settlers, but some were occupied by locals or by Indians from elsewhere.

Generally, all settlements followed the same pattern. This went for the various branches of authority: ecclesiastical (headed by the bishop—in this period one for Goa, and one for Kochi), civil (headed by the governor), military (headed by the captain general), naval and commercial (headed by the *feitor*). Each of the 11 settlements for which we have wage data in this period had a fortress supervised by a captain (*capitão*). They also included a bailiff (*meirinho*), a constable (*condestável*), one or more churches and a factory. The city of Goa was defended by four fortresses (Benastarim, Naroá, Pangim

and Bardez), as well as other defensive structures commanded by a captain. The *meirinhos*, earning in the third quarter of the century between 61 and 69 *reis* per day, clearly were ranked below the constables and captains, who earned over 80 and mostly over 100 *reis*.

The salaries of the highest echelons will not be analysed here. These pertain to 76 functionaries who received from the crown at least 80,000 *reis*, or more, per year. This is the top of society (for obvious reasons well represented in our data), which does not tell us much about the general income levels we are looking for. Not only because these are top incomes as such (the highest salary is no less than 800,000 *reis*) but also because it is most likely that the sums thus obtained by official salaries are only part of the total income of the households concerned. After all, some of these persons performed several functions (multiple office holding) and the earnings from their commercial activities are well known by historiography (Pinto, 1997, pp. 30–34; Thomaz, [1994]1998, pp. 573–577; see also Cruz, 1988).

Five settlements next to the fort were properly called towns (*cidade*) and were governed by a captain with the aid of an *alcaide* and a bailiff (both earning the above-mentioned salary). Goa, the capital, had two *alcaldes*, one for the town *intra muros* (*do dentro*) and one for the town *extra muros* (*de fora*), while the one *meirinho* of Diu articulated both town and countryside (*campo*). The three other cities were Kochi, Chaul and Bassein, of which the first was the most important because it also had a bishop who only had to obey the archbishop of Goa. The five other settlements were apparently governed directly from the fortress.

Three settlements (Goa, Daman and Bassein) were subdivided into fiscal intendancies (*tanadarias*), all under the jurisdiction of a *tanadar* (sometimes also called *meirinho*). Goa had the most complicated structure, as it was subdivided into the Island of Goa, Carambolim and a number of *passos* (literally ‘passages’, probably meaning districts), namely those of Vagaçaim, Naroá, Benastarim, Daugim, Pangim and Ribandar, besides the *Passoseco*.⁸ Daman also had a number of *tanadarias*: those of Sangens, Quelme Mahim and Tarapor,⁹ while Bassein had six: Tanã, Agaçaim, Tanar, Caranja Island, Salsete Island and Maim Island.

A customs house (*alfândega*) had been established at the Mandovi river in Goa, and two in Diu, one being at Gogallã. There were several other institutions, most of which were in the capital.

Think of dockyards (*ribeiras*: in Goa, Kochi, Bassein and Kannur), mint houses (*moedas*: one in Goa, one in Kochi; important indicators of monetization), public weighing houses and two gun foundries (one in Goa and the other in Kochi). And apart from these production centres, we find jails, hospitals (the one of the *Misericórdia* in Bassein and one in Kollam), as well as several ecclesiastical institutions.

Of course, most of the inhabitants of the Portuguese settlements were engaged in agriculture, but these do not appear in our sources. Luckily, we find quite a number of craftsmen employed by the types of workshops listed above, as well as huge concentrations of construction workers, especially hired to work on the fortifications of Diu. Together with the many soldiers and their officers, the result was a well-diversified set of occupations, each with their own standard of remuneration.

Apart from the structure of the administrative sector, and of the economy in general, which accounts for the existence of great wage differences, we also have to investigate the extent to which existing and emerging social categories played a role in determining wage rates. For some categories, this is possible because our sources provide more information than just personal names and/or occupational titles and wage sums. We will subsequently discuss categories that include caste, free and unfree labour, gender, age, ethnicity and a few others.

Caste indications were not only inherited by the Portuguese settlers, but they were also modified by them (*casta*, meaning ‘descent’, is a Portuguese, not an Indian word). Therefore, the interpretation of caste indications deserves some attention here. Most important for us, there is a strong relationship between caste and occupation, but how strong that was in these concrete cases is not easy to determine (Xavier, 2016, pp. 288–289). Most historians agree about the rigidity of the caste system in the 19th and 20th centuries. Yet, according to some, in the period prior to 1800, the system was more flexible and, thus, allowed for an increased occupational mobility (Parthasarathi, 2011, pp. 3–6, 59–60). For example, members of certain castes still could choose from different occupations instead of one, the same as their fathers had, whereby there is relevance in the question to what extent caste-bound occupations may have provided an efficient institution for the transmission of skills. Our sources allow us to add a few observations for the 16th century.¹⁰

The terms *nair* and *naik* are particularly challenging to translate properly into modern English, more so—it seems—than other designations such as *bigarin* (carrier, usually carrying goods on his head), *mainato* (washerman), *parvu* (writer) or *nafar* (servant). *Nair* is the social category that appears earliest in Portuguese sources, that is in the *Book of Duarte Barbosa* (1512–1515). This author speaks of the ‘casta de Nayres’ to designate a martial group with endogamic practices. According to our sources, their status must have been high, because, apart from some *naires* without further occupational indication (indicated by us as ‘high-caste member’), we find the following combinations with *naire*: manager of the elephants of the king of Kochi, supervisor of food provisioning for these elephants, person in charge of a fortress and/or factory and weighman (most likely the supervisor of the public scales). In addition, two of them bear the formal dignitary title of *Dom*, and one was a Christian convert (*nayre cristão*), possibly revealing the economic and social advantages of converting to Christianity.¹¹ Another apparent caste indication is *naik* or *nayque* (*quechenaik*, alone and in combination with *malanaique*, on one occasion also *gorcanaique*), which is invariably used in relation to commanding military positions and is also considered as a high social class (Pearson, 1973).¹² We therefore have translated it as ‘captain of the native infantry’. What the exact relation between the much more numerous *naires* and the more elitist *naiques* was in 16th-century Goa cannot be derived from our data and needs further investigation.

Next comes the distinction between free and unfree labour. The latter, in principle, did not earn wages, but the Portuguese bookkeepers note down expenses for maintenance, so that fortunately we also catch a glimpse of food expenses for slaves.¹³ We say ‘in principle’ because though all slaves received maintenance money, some of them also received wages. This, of course, was only possible with the consent and cooperation of their master, who in return might take part of their slave’s wage. They are called ‘escravos de ganho’. Leaving aside the precise nature of slavery in the early Portuguese settlements,¹⁴ maintenance for slaves provides an important indication of what was considered to be an adequate diet for an able-bodied man, plus sometimes other needs, like clothing. As slaves occur frequently in the sources, we sometimes can compare their remunerations with those of free labourers.

Less present, though not totally absent, are women. Next to one single nurse (*enfermeira do hospital da fortaleza de Coulão*) and two native women working at the supplies warehouse of Kannur (earning half of their male colleagues), we encounter 37 *mulheres cristãs malabares pera huso dos homens*. The expression ‘for the use of men’ clearly indicates their occupation as sex workers, for which we have seven entries for Calicut for 1514–1515.¹⁵ That is not much, but it might at least give us an idea about the gendered norms for food supplies, as all Calicut women received certain amounts of rice and butter by way of maintenance.

Somewhat more is known about age, as there are 72 entries for boys. Deducting the entries referring to both wage and maintenance for the same individuals, we are left with 54 entries for no less than 24,183 individuals (see Table 1.1). This allows us to make

Table 1.1 Entries for Remunerations of Boys

English Translation of Occupation	Portuguese Original	Entries Total	Entries for Single Individuals	Number of Single Individuals
Ship’s boy	<i>Grumete</i>	1	1	1
Water boy	<i>Boy de água</i>	5	5	21
Sunshade boy	<i>Boy de sombreiro</i>	15	15	16
Worker (from Malabar)	<i>Moço cristão Malabar</i>	1	1	1
Blacksmith	<i>Moçoferreiro da terra</i>	1	1	8
Chorister	<i>Moço de coro</i>	10	10	24
Caulker (slave)	<i>Calafate (escravo)</i>	1	1	10
Caulker (Christian)	<i>Calafate (cristão)</i>	1	1	13
Carpenter (boy)*	<i>Moço(s) oficial(ais)</i>	2	1	3
Worker	Boy da terra (Diu 1547)	34	17	24,085
Worker	Boy (Kannur 1532–1533)	1	1	1
		72	54	24,183

Source: ANTT, NA, n.º. 622–623; B. A., Cód. 51-VII–8, fls. 1–197; Botelho ([1554]1868; de Jesus, 2012b; Pissurlencar, 1951).

Note: *Boys that work for officials, responsible for carpentry work.

some comparisons between adult men and boys in a few sectors, as well as to make some comparisons between the compensation for boys and adult women.

Finally, there is supplementary information, mostly regarding ethnicity and religion but also on migration and marital status. As to ethnicity, we encounter, of course, Portuguese individuals, an occasional German, Basque and Malay, as well as Indians, either in general designations such as *indio*, *negro* (black) or (*homem*) *da terra* (native) or more specifically as Malabar, *canarim* or *Gujarathi da terra*. The term ‘Christian’ implied converted Indians and their offspring, whereas all Europeans were automatically considered to be Christians (including new Christians), and—we presume—all other Indians in general were classified as Hindus, unless explicitly indicated as Muslim or *mouro*, which is probably the same. On the basis of these presumptions, we can investigate whether and to what extent distinctions were made in the remuneration of Christians (European and Indian) and Hindus performing the same or similar tasks and in which occupations they dominated, respectively.

1.5. SOURCES FOR WAGES

Our data set benefits from a large number of primary sources, both in manuscript and in published form. They allow for a subdivision of the entire data set into three sub-periods: 1514–1526, 1527–1544 and 1545–1570, though unfortunately unevenly spread over the three regions—north-west, centre and south-west India—and even more over the 11 locations on India’s western coast (Table 1.2).

This data set enables us to adopt a methodology similar to the one previously developed for Kannur 1516–1517 (de Matos & Lucassen, 2019). We will use information on prices and wages in order to reconstruct real wages by expressing the wages in rice and grain (wheat). To assemble the data set, we processed three main types of sources: receipt and expense books; budgets from the *Estado da Índia* and *Regimentos*.

The main *corpus* of the first sub-period (1514–1526) is the set of receipt and expense books (*livros de receita e despesa*) produced by the Portuguese officers (*feitores* and *tesoureiros*) who controlled all financial operations conducted by the royal factories (*feitorias*).¹⁶ Besides the acquisition of goods and commodities for sale, they also

Table 1.2 Portuguese Settlements for Which Relevant Wage Data Are Available between c. 1514 and 1570

Settlements per Region	1514–1526	1527–1544	1545–1570
North-west			
Diu			x
Daman			x
Bassein			x
Chaul	x		x
Centre			
Goa	x	x	x
South-west			
Basrur			x
Kannur	x	x	x
Calicut	x		
Cranganore			x
Kochi	x		x
Kollam			x

Source: Appendix 1.1.

provide wages and maintenance to a number of individuals. In addition to the receipt and expense book, already used for the previous case study of Kannur, two incomplete books will be studied for Chaul and Calicut, both of them available as original manuscripts at the National Archives at Lisbon (*Torre do Tombo*).¹⁷ There are also two single documents with payments made to local troops and servants for Goa in c. 1520 and 1526.¹⁸

The second sub-period, 1527–1544, is undoubtedly the least privileged by these early records because of a total lack of wage data. Nevertheless, it was possible to use maintenance payment books for Goa (1532) and Kannur (1532–1533).¹⁹

For the third sub-period, starting in 1545, we relied on two different types of sources. The first is the *Livro das mercês que fez o senhor Dom João de Castro*.²⁰ This document contains a highly heterogeneous set of expenses, including wages of craftsmen and

so-called *lascarins*, employed at the Goan dockyard. While most of them were Portuguese, there were a few Indians, allowing for a comparison between these two types of skilled labourers. Whatever the precise nature of the work of the *lascarins* was, they also formed an important part of the local militia. The second set of data originates from the reconstruction of the fortress of Diu in the years 1546–1547 after the second siege of this coastal town.²¹ It consists of both a book of expenses²² and a book of payments made to Gujarat workers by the royal factor António Gil.²³

After 1550, new sources become available in the form of a much more standardized corpus of annual overviews of budgeted expenses, required by the Portuguese king for all his settlements east of the Cape of Good Hope. It starts with the *Tombo geral do Estado da Índia* of 1554, first published by Lima Felner in 1868. It was followed by the so-called *Regimento das fortalezas da Índia*, published by P. S. S. Pissurlencar, for the years 1564/1565 (and soon after included several other places such as Basrur for 1570), providing data for nine of our locations. Like the former *Tombo*, the *Regimento* contains budgets for wages as well as for prices of basic commodities.²⁴ These prices and wages are estimates (based on averages of the previous 5 years) in contrast to real expenses in our sources collected from 1545 to 1548. We consider that this will not compromise the strength of the data set for our long-term comparison.

While the sub-period 1527–1544 allows for only limited conclusions about individual daily incomes, the earlier and later ones provide information on the earnings of no less than 73,189 individuals (Table 1.2).

1.6. METHODS OF ANALYSIS: WAGES, MAINTENANCE AND TOTAL INCOME

In our sources, we find two types of income: wages (as discussed above) and maintenance money. The most important methodological finding of our research is that these were not alternative ways of payment, but rather complementary. As a rule, in this Luso-Indian context, workers employed by the *Estado da Índia* received both, as we will demonstrate. Consequently, in general, we need to combine the two in order to reconstruct the total remuneration received for waged work.

Table 1.3 Number of European and Non-European Entries of Individual Daily Income on the Data Set, per Location and Sub-period (1514–1570)

	1514–1526		1545–1570		Totals	
	European	Indian	European	Indian	European	Indian
North-western						
Diu	0	0	151	35,285	151	35,285
Daman	0	0	139	643	139	643
Bassein	0	0	120	476	120	476
Chaul	6	3	30	40	36	43
Total NW	6	3	440	36,444	446	36,447
Centre						
Goa	1	907	262	16,588	263	17,495
Total Centre	1	907	262	16,588	263	17,495
South-western						
Basrur	0	0	10	14	10	14
Kannur	13	18,300	23	11	36	18,311

Cranganore	0	0	6	19	6	19
Calicut	0	12	0	0	0	12
Kochi	0	0	71	31	71	31
Kollam	0	0	21	7	21	7
Total SW	13	18,312	131	82	144	18,394
Totals	20	19,222	833	53,114	853	72,336
Totals (per sub-period)	19,242		53,947		73,189	

Source: Appendix 1.1 and Table 1.2.

Most Europeans were recruited to serve in India under the condition of receiving their wage (*soldo*) from the enrolment list (*matrícula*) of the treasury of the Estado. This *soldo* varied heavily according to occupation, social status, conditions of enlistment and also to the political and military Indian context. For the higher offices, another term to designate ‘wage’ appears as *ordenado*. The term itself is an equivalent of *soldo*, albeit, according to early modern dictionaries, *ordenado* could also mean ‘what you give for an individual’s sustenance {...}’ (Bluteau, 1712–1728, p. 6, 106).²⁵

Apart from other non-regular forms of income (e.g., extra donations of edibles, non-edibles such as cloth, or money), our sources show that, in addition to their wage or salary, all waged workers—Indian and European alike—received a second type of remuneration, that is, their daily *mantimento* (maintenance; for Indians sometimes called *batta*).²⁶ Payable either in kind, cash or both, this maintenance was based on the daily amount deemed necessary for an adult working man. Similar subsidies can be found, for instance, in Mughal India in the 17th century (where *batta* meant—and still means—allowance) (Haider, 1996, pp. 334–335).

Two examples of such payments in kind may illustrate this practice, one from Diu in 1546–1547, and the other from Basrur in 1570. Portuguese workers and several Indian converts, recruited in Goa to work in Diu, received not only rice (both white and *giraçal*) and fish but also *biscoito*, butter and olive oil as maintenance.²⁷ Likewise, local/Indian *canarins* masons and diggers would receive black rice and fish, exceptionally supplemented with butter.²⁸ The maintenance provided in Basrur in 1570 to native sailors consisted of 2 *medidas* (approximately 1 kilo) of black rice (*Oryza Sativa*, Lin.) per day together with one king fish (*Scomberomorus Cavalla*; Cuvier, 1829) per month. Their taskmasters received twice as much (Pissurlencar, 1951, p. 438). While there is no evidence that this portion of edibles entirely covered their diet per se, we can assume that it did cover their subsistence needs. According to de Zwart and Lucassen (2020), a normal-sized Indian adult male in the 1840s would need 2,000 calories per day in order to provide enough nutrients to survive and to work for their subsistence. With a daily maintenance portion of a kg of black rice and 330 g of fish, each sailor would obtain 3,877 calories.²⁹ Although this was more

than sufficient for his upkeep, we must bear in mind that on many occasions there was a household to sustain, which could represent a total of 8,000 calories (representative of a couple and two children). We believe, though, that additional income provided by the wage component would be enough to meet these needs.

On the other hand, some Europeans—like the soldiers of the *armada*—enjoyed, as maintenance a subsistence allowance of 25.5 *arráteis* (each approximately 0.47 kg) of *biscoito* per month, 2 *medidas* of white rice per day and 1 *canada* (approximately 1.4 litre) of butter also per month (Pissurlencar, 1951, p. 437). This would represent a daily content of 5,854 calories, thus 51 per cent more than their non-European counterparts.³⁰ Although with a presumably higher body mass, a European would consume a little more than 2,000 calories, it still would enable him to sustain a household of four persons. As wages paid to Europeans were much higher than for Indians (see Tables 1.5 and 1.6), the real total income of Europeans exceeded several times that of Indians with the same occupations (de Zwart & Lucassen, 2020; Humphries & Weisdorf, 2019).

Most recordings of maintenance payments can be observed for the sub-period of 1545–1570 (see Table 1.4: 34,944 entries, approximately 90% of the total). In contrast to the first sub-period 92.5 per cent of these payments are made to Indian workers.³¹ Most important for us are the maintenance data for 1527–1544 (though only for Goa and Kannur) because not much else is known about remunerations in this central sub-period.

Recently, Humphries and Weisdorf (2019, p. 2876; cf. Beck et al., 2014) have also pointed to this phenomenon of combined income of cash on top of an ordinary wage remuneration in medieval and early-modern Europe, which they call ‘board wages’. These are the wages we have reconstructed in our data set and which we will use for our analysis.

1.7. DAYS WORKED

Although the two income components (wage plus maintenance) were paid to the majority of all workers (compare Tables 1.3 and 1.4), a substantial number of Indians were only paid a wage (sometimes called *musara* from the Marathi word for ‘salary’; originally Persian

Table 1.4 Number of European and Non-European Entries of Individual Daily Maintenance on the Data Set, per Location and Benchmark (1507–1570)

	1507–1526			1527–1544			1545–1570			Totals	
	European	Indian		European	Indian		European	Indian		European	Indian
North-western											
Diu	0	0		0	0		17	34,766		17	34,766
Daman	0	0		0	0		1	3		1	3
Bassein	0	0		0	0		14	1		14	1
Chaul	20	9		0	0		3	1		23	10
Total NW	20	9		0	0		35	34,771		55	34,780
Centre											
Goa	1	9		55	94		55	0		111	103
Total Centre	1	9		55	94		55	0		111	103
South-western											
Basrur	0	0		0	0		23	4		23	4
Kannur	2,584	145		35	32		3	4		2,622	181

Cranganore	0	0	0	0	0	0	0	1	0	1	0
Calicut	1	885	0	0	0	0	0	0	0	1	885
Kochi	72	38	0	0	0	0	31	15	87	69	0
Kollam	0	0	0	0	0	0	2	44	39	2	0
Total SW	2,657	1,068	35	32	32	44	39	2,736	1,139	2,902	36,022
Totals	2,678	1,086	90	126	126	134	34,810	34,944	38,924	38,924	38,924
Totals (per sub-period)	3,764	216	216	216	216	216	216	216	216	216	216

Source: Appendix 1.1 and Tables 1.1 and 1.2.

mushahra for monthly salary or wages) for the days they were actually employed. This was especially true in the army and in the navy (Rodrigues, 1990, pp. 21–22, 28–57). It is therefore important to know how many days they were actually employed.

As stated by a number of historians, it is not at all obvious that each individual worked 250 days per annum, as is conventionally assumed in discussions about living standards. In late 17th-century Surat, a mint worker would work an estimated 20 days per month or 240 per year (Haider, 1996, p. 337). Some estimates for Western Europe suggest 165 days for medieval labourers, rising to 330 days with the advent of the Industrial Revolution (Allen, 2001; Allen, 2007; Allen et al., 2012; Blanchard, 1978; Humphries & Weisdorf, 2019; Voth, 2001). Regarding the case of Portuguese settlements in India, no information is available so far. Yet we may have to take into account that the three- to four month-long monsoon season (i.e., June, July and August) in the coastal regions reduced maritime labour activities substantially. On the other hand, it is to be expected that non-naval (or ‘non-coastal’) activities increased at the same time, particularly in agriculture. In the anticipation of further detailed research in this field, we will refrain from reconstructing annual incomes and will restrict ourselves to monthly and, preferably, daily remunerations.

1.8. REGIONAL VARIATIONS AND MARKET INTEGRATION

To what extent can we speak of a 16th-century integrated labour market in Western coastal India? This is an important question to support the argument that Luso-Indian wages may be taken as representative for a much wider region and, in fact, insofar as no other evidence becomes available for India as a whole. We will first analyse the skilled and then the unskilled occupations. Table 1.5 compares nominal income for skilled occupations for each region (north-western, central and south-western coastal India) in the period 1514–1570. Some tendencies are clear at first sight.

The first is that—as seen in the caloric value of maintenance—European skilled incomes tended to be at least double of their Indian counterparts. Compare the European scribe with the Indian interpreter, and the European blacksmith and cooper with

Table 1.5 Nominal Average Income for Skilled Occupations of European and Indian Workers in Western India, 1514–1570 (Reais per Day)

<i>European</i>	<i>NW</i>	<i>N</i>	<i>Centre</i>	<i>N</i>	<i>SW</i>	<i>N</i>
Blacksmith						
1514–1526	–	–	–	–	–	–
1545–1570	73.2 (Diu)	2	71.2 (Goa)	6	101.9 (Kochi)	1
Cooper						
1514–1526	–	–	–	–	–	–
1545–1570	59.2 (Chaul)		58.4 (Goa)	9	72.5 (Kochi)	2
Scribe						
1514–1526	–	–	–	–	43.5 (Kannur)	3
1545–1570	94.6 (Chaul)	4	95.8 (Goa)	29	100.9 (Kannur)	3
Watchman						
1514–1526	–	–	–	–	–	–
1545–1570	55.9 (Chaul)	2	70.7 (Goa)	2	62.5 (Kannur)	2
<i>Indian</i>	<i>NW</i>	<i>N</i>	<i>Centre</i>	<i>N</i>	<i>SW</i>	<i>N</i>
Carpenter						
1514–1526	–	–	–	–	18.8 (Kannur)	7,973
1545–1570	25.1 (Diu)	40	32.0 (Goa)	5	–	–
Interpreter						
1514–1526	–	–	–	–	–	–
1545–1570	39.5 (Chaul)	2	39.5 (Goa)	1	44.4 (Kochi)	2
Military caste (<i>naique</i>)						
1514–1526	–	–	11.3 (Goa)	114	28.8 (Kannur)	26
1545–1570	27.0 (Diu)	4	24.5 (Goa)	37	25.1 (Kannur)	6
Rifleman						
1514–1526	–	–	–	–	–	–
1545–1570	19.7 (Bassein)	4	23.7 (Goa)	54	19.1 (Cranganore)	13

Source: Appendix 1.1 and Table 1.2.

Note: Criteria = Locations and occupations were chosen based on their share in the data. N stands for the number of individuals per occupation.

the Indian carpenter; likewise, compare the unskilled the European watchman with the Indian *naique* and rifleman. Second, European nominal income tends to be slightly higher in the south-west than in the centre (Goa) and north-west, with the exception of the case of the few watchmen in Goa. This difference is not too consequential, and the fact that it does not show clearly among the Indian workforce may be because they are averages. Also, there were relatively more masters in our south-western sample.

Perhaps the most striking tendency is that, both among European and Indian occupations, there are no clear or significant regional differences in payments, which demonstrates a certain integration of the labour market. The exception is payments made to members of the military caste (*naiques*) in the earliest sub-period. They show Goan incomes that are less than half that of their Kannur counterparts (11.3 against 28.8 *reais* per day). Yet we have to bear in mind that the minimum daily income paid to *naiques* in Kannur is quite close to the Goan average (13.8 *reais* per day), which is important if we also take into account that Goa provides four times more cases than Kannur (113 over 26 entries).

When observing nominal average unskilled wages for coastal India (Table 1.6), a similar situation is found. The data for Europeans are so scarce that the results seem inconclusive. The real point in favour of the existence of an integrated labour market along the west coast of India comes from unskilled Indian occupations.

Torch men seemed to be paid similar sums everywhere, including in Goa 1545–1570, where the median is 11.9 *reais* per day. The higher average is probably related with the fact that by then Goa had become the political capital of the *Estado* (its best paid torch man peaked at 26 daily *reais*). In fact, differences that ask for an explanation lie much more in the relatively low incomes of servants and peons (pawns), which we observe in Goa, as compared to all other unskilled Indian incomes in the first and last sub-periods in other places. At this moment, we cannot offer a plausible explanation for this phenomenon. Less enigmatic is the comparatively low average income for servants in Diu (7.44 *reais* per day, with a maximum of 23.04 and a median of 3.69), which can be explained by the high numbers of individuals (almost 35,000), mostly employed in the coarsest type of earthwork with the reconstruction of the

Table 1.6 Nominal Average Income for Unskilled Occupations of European and Indian Workers in Western India, 1514–1570 (*Reais* per Day)

European	NW	N	Centre	N	SW	N
Prison guard						
1514–1526	–	–	–	–	–	–
1545–1570	42.7 (Chaul)	1	46.0 (Goa)	1	49.3 (Kochi)	2
Gatekeeper						
1514–1526	–	–	–	–	–	–
1545–1570	42.7 (Chaul)	1	104.8 (Goa)	5	52.9 (Kannur)	1
Indian						
Boy						
1514–1526	–	–	13.4 (Goa)	4	–	–
1545–1570	11.9 (Diu)	3	11.9 (Goa)	3	–	–
Man/Servant						
1514–1526	–	–	8.87 (Goa)	158	12.6 (Kannur)	10,277
1545–1570	7.4 (Diu)	34,514	–	–	–	–
Peon						
1514–1526	–	–	9.2 (Goa)	573	–	–
1545–1570	15.3 (Diu)	94	12.3 (Goa)	277	15.3 (Kannur)	4
Torchman						
1514–1526	–	–	13.2 (Goa)	12	–	–
1545–1570	11.9 (Diu)	11	17.3 (Goa)	14	–	–

Source: Appendix 1.1 and Table 1.2.

Note: Criteria as in previous table.

fortress of Diu during 1546–1547. Likewise, we can hypothesize that these low incomes were a form of Portuguese retaliation against the natives after the siege of Diu (1546).³²

An interesting point is that labour migration may be an indicator of an integrated labour market. In the above-mentioned episode in Diu, a small part of the labour force of slightly more than a

Table 1.7 Average Income of Labour Migrants Recruited for the Reconstruction of the Fortress of Diu, 1547 (in Reais per Day)

	Origin (with Distance by Sea to Diu)						
	Bassein (200 km)		Chaul (400 km)		Goa (750 km)		Total
	R/d	N	R/d	N	R/d	N	N
Unskilled							
Bigarin (Indian)	14.2	31	16.5	57	17.9	6,654	7,742
Digger (Indian)	–	–	12.0	12	22.0	1,100	1,112
Skilled							
Mason (European)					65.7	77	77
Mason (Indian)			24.2	34	22.0	1,112	1,146
Taskmaster (Indian)			32.0	1	32.0	22	3
Total		31		104		8,875	11,010

Source: Table 1.2 and de Jesus (2012b).

Note: R/d is reais per day.

thousand individuals had been recruited from Goa, Bassein and Chaul (Table 1.7).

In general, large-scale labour migration is a sign of labour market integration, but for the unskilled Indian labour force this table also reveals a geographical logic behind wage differences: the farther away they were from Diu, the higher the wage was (see Figure 1.1). Thus, ordinary labourers (*bigarins*) who travelled 750 km to get to Goa agreed to come for 17.9 *reais* per day; those who came from nearly half that distance (Chaul) settled for slightly less (16.5 per day) and those who came from nearby Bassein were hired for 14.2. Local *bigarins* could be recruited for a mere 13 *reais* per day. For diggers, we observe similar differences on the basis of geography. Only in the case of skilled masons did distance not seem to have any influence on wages.

Market integration cannot be analysed merely by comparing average income in different places; it also requires a geographical comparison of price levels, particularly staple commodities (Table 1.8).

Table 1.8 Average Prices for Basic Commodities in Western Coastal India, 1514–1570 (in Reais per Kg)

North-western					Centre			South-western/South								
	Diu	N	Bassein	N	Chaul	N	Goa	N	Kannur	N	Calicut	N	Kochi	N	Cape Comorin	N
1514–1526																
Rice (per kg)	–	–	–	–	2.8 (1516)	15	6.6 (c. 1520)	4	4.7 (1516)	12	6.1–8.5* (1515)	1–5	2.9 (1516)	1	–	–
Wheat (per kg)	–	–	–	–	3.8 (1516)	9	–	–	4.9 (1516)	14	5.6 (1515)	2	–	–	–	–
Olive oil (per litre)	–	–	–	–	–	–	10.7 (c. 1520)	1	12.2 (1516)	1	–	–	–	–	–	–
Butter (per litre)	–	–	–	–	29.3 (1516)	15	–	–	22.6 (1516)	1	–	–	–	–	–	–
1545–1570																
Rice (per kg)	1.4 (1547)	2	2.5 (1547)	2	–	–	4.8 (1547)	2	–	–	–	–	–	–	–	–
Olive oil (per litre)	14.3 (1565)	1	20.5 (1554)	2	10.7 (1554)	4	41.3 (1554)	3	–	–	–	–	10.7 (1554)	1	–	–
Chicken (per unit)	–	–	13.3 (1548)	1	–	–	100 (1554)	1	–	–	–	–	–	–	8.3 (1548)	1

Source: See Table 1.2.

Note: * For Calicut 1515, prices of rice vary according to the quality (black rice averages 6.1 reais per kg, while white rice sold for 8.5 reais per kg).

For this kind of comparison, long and detailed price series are needed, as it is well known that annual variations in crop yields cause prices to vary considerably. Even within the same year, seasonal fluctuations matter. Such series are lacking and therefore the significant disparity of prices in Table 1.8 is not surprising. Where we can compare, however, grain prices between different places within the same calendar year (but not necessarily within the same season), we observe the lowest prices in the north and the highest in the south with Goa in between.

During the reconstruction of the fortress of Diu in 1547, there were clear differences in the purchasing price of rice. A total stock of a little over 27,000 kg, consisting mostly of normal rice, comprised the following: one part of local rice, bought for about 5 *tangas* per *candil* or 1.4 *reais* per kg; another part purchased by the royal factor of Bassein at 1.9 *reais* per kg (minimum price, against an average of 2.5, see Table 1.8); a third part from Goa at a cost of no less than 4.9 *reais* per kg. Similar price differences apply to the c. 17 per cent of cheaper varieties (*arroz preto* or 'black' rice and *giraçal*). The difference in prices can explain why most of the rice (c. 72%) was imported from Bassein, with local rice representing over 26 per cent of the total, leaving an insignificant percentage for the high-priced Goan supply (1%).³³

It is no wonder that contemporaries found Bassein to be 'extremely affordable' by contrast with Goa, where edibles were considered very expensive.³⁴ One of the main reasons for such high prices was the inherent difficulty of producing consumables in Goa, whereby many had to be imported (Cunha, 2011).

The substantial price variations in staple grains that occurred systematically from north to south along the west coast applies to both cross sections of 1515–1516 and 1547, but unfortunately there is a dearth of information for later years. Much more important than local price variations is the understandable reaction of merchants, who shipped grain and rice from the cheapest to the most expensive places promoting market integration. We saw this phenomenon in our previous research for Kannur in 1515–1516, where rice was imported in large lots from places where it was more affordable, such as Kochi, Diu and Chaul (de Matos & Lucassen,

2019, p. 122). The location of all these places along the Indian Ocean made integration feasible, but we can assume that the high cost of transportation further inland would have (somewhat) slowed down integration.

Assuming an integrated labour market with more or less the same nominal wage levels all along the coast, but with generally lower commodity prices in the north than in the south, we may expect that real wages of unskilled Indian labour in the north were more favourable than in the south. In the next section, we will see whether that really is the case.

1.9. LONG-TERM TRENDS IN WAGES AND INCOME

Besides a tendency towards labour market integration, which we concluded from Tables 1.5 and 1.6, we now return to these data (as summarized in Appendix 1.1) in order to study long-term trends by comparing the same or similar occupations, in the same cities, between the first and last sub-period (respectively, 1514–1527 and 1545–1570). If we concentrate on the most robust nominal wages in the same places (according to numbers in the data), we observe a clear hike in the nominal wages of skilled, but especially of unskilled Indian labour in Goa (see in Table 1.6, for Goa, the hundreds of wage data for peons and the much lower wages for torch men). This is corroborated by a similar tendency among skilled Europeans in Chaul and Kannur, and though supported by much less data, by skilled Indians in Kannur and, to a certain extent, all over the south-west. The rest of the evidence is very weak, but it is fair to say that the few comparable recorded wages of unskilled Indians in the south seem to have stayed fairly stable over time.

Assuming that there was a tendency for nominal wages to increase around the middle of the 16th century, beginning in the 1530s, we now can turn to their significance for real incomes. We will do so by first focusing on the development of maintenance money, and then on income at large.

The data on maintenance money are especially important for us because they also shed some light on incomes in the intermediate

sub-period and thus on long-term developments between the three sub-periods.

Five out of six categories of workers in the north-west and centre received enhanced maintenance money over time, while for the south we find more or less stagnating figures. Most important is the information about the pace of this development. It shows that it took place between both 1507–1526 and 1527–1544, as well as between the second sub-period and 1545–1570. Unfortunately, we cannot determine in which decades maintenance monies increased most. It may be safe to say that we see a gradual development throughout the 1530s, 1540s, 1550s and 1560s. Realizing that maintenance is only a subsidy to supplement a worker's daily subsistence, we deduce that wage components of income had a more decisive role in the increase observed over that time. Finally, let us turn to real income as the total sum of both real wages (nominal wages, see Tables 1.5 and 1.6, adjusted, as much as possible to local prices, see Table 1.8) and maintenance (Table 1.9), first for skilled (Table 1.10) and then for unskilled labourers (Table 1.11).

When analysing real income for both European and Indian skilled workers, expressed in rice, it is obvious that the comparatively higher cost of living in Goa throughout 1514–1570 (see Table 1.10), reduced their purchasing power considerably. Real European skilled income in Goa was often more than three times less compared to Diu or Chaul, as we can see in the cases of blacksmiths, coopers and scribes. Likewise, because of lower rice prices in the north-west, real income of Indian skilled workers is much higher there than in the centre and even more than three times higher for interpreters and *Naiques*. Also noteworthy is the apparent increase of purchasing power of Indian skilled labour in the case of *Naiques* (1.7 kg of rice per day in 1514–1526 to 5.1 in 1545–1570). While further confirmation is needed for other categories of labour, this evidence supports the main thesis of our research: the hike in real wages started somewhere in the 1530s–1540s.

The evidence for unskilled European labour is not strong enough to establish a trend. However, for the real unskilled Indian

Table 1.9 Evolution of Average Nominal Maintenance Paid to European and Indian Skilled and Unskilled Workers, 1507–1570 (*Reais* per Day)

European	NW (Chaul)	N	Centre (Goa)	N	SW (Kannur)	N
Skilled labour						
1507–1526	22.6	8	6.0	1	19.3	1,429
1527–1544	–	–	17.5	43	17.8	28
1545–1570	16.4	1	25.5	52	18.1	2
Unskilled labour						
1507–1526	14.3	12	–	–	15.0	1,155
1527–1544	–	–	15.0	12	15.9	7
1545–1570	19.7	2	19.7	3	13.2	1
Non-European	NW	N	Centre	N	SW	N
Skilled labour						
1507–1526	14.2	12	15.7	9	–	–
1527–1544	–	–	16.3	71	16.5	30
1545–1570	19.7	1	–	–	–	–
Unskilled labour						
1507–1526	–	–	–	–	2.0 ³⁵	145
1527–1544	–	–	13.4	23	14.0	2
1545–1570	2.0*	34,440	–	–	9.9	4

Source: See Tables 1.1 and 1.2.

Note: *Maintenance paid in Diu, 1547.

incomes, long-term developments are much clearer. Whereas, again due to the high price level, Goans were much worse off than their northern colleagues, the overall trend for the centre is positive: wages increased gradually during the 16th century, most clearly illustrated for the many Goan peons. Again, for the south, there are data lacking that would enable us to determine whether it was also a factor in this improvement.

Table 1.10 Real Income of European and Indian Skilled Labour Expressed in Rice, 1514–1570 (Purchase Power of Kg per Day)

<i>European</i>	<i>NW</i>	<i>N</i>	<i>Centre</i>	<i>N</i>	<i>SW</i>	<i>N</i>
Blacksmith						
1514–1526	–	–	–	–	–	–
1545–1570	52.3 (Diu)	2	14.8 (Goa)	6	–	–
Cooper						
1514–1526	–	–	–	–	–	–
1545–1570	42.3 (Chaul)*		12.2 (Goa)	9	–	–
Scribe						
1514–1526	–	–	–	–	9.3 (Kannur)	3
1545–1570	67.6 (Chaul)*	4	20.0 (Goa)	29	–	–
Watchman						
1514–1526	–	–	–	–	–	–
1545–1570	39.9 (Chaul)*	2	14.7 (Goa)	2	–	–
<i>Indian</i>	<i>NW</i>	<i>N</i>	<i>Centre</i>	<i>N</i>	<i>SW</i>	<i>N</i>
Carpenter						
1514–1526	–	–	–	–	4.0 (Kannur)	7,973
1545–1570	17.9 (Diu)	40	6.7 (Goa)	5	–	–
Interpreter						
1514–1526	–	–	–	–	–	–
1545–1570	28.2 (Chaul)*	2	8.2 (Goa)	1	–	–
Military caste (Naique)						
1514–1526	–	–	1.7 (Goa)	114	6.1 (Kannur)	26
1545–1570	19.3 (Diu)	4	5.1 (Goa)	37	–	–
Rifleman						
1514–1526	–	–	–	–	–	–
1545–1570	7.9 (Bassein)	4	4.9 (Goa)	54	–	–

Source: See Tables 1.1 and 1.2.

Note: *Price of rice used proxy from Diu (1547).

Table 1.11 Real Income of European and Indian Unskilled Labour Expressed in Rice, 1514–1570 (Purchase Power of Kg per Day)

<i>European</i>	<i>NW</i>	<i>N</i>	<i>Centre</i>	<i>N</i>	<i>SW</i>	<i>N</i>
Prison guard						
1514–1526	–	–	–	–	–	–
1545–1570	30.5 (Chaul)*	1	9.6 (Goa)	1	–	–
Gatekeeper						
1514–1526	–	–	–	–	–	–
1545–1570	30.5 (Chaul)*	1	21.8 (Goa)	5	–	–
Indian						
Boy						
1514–1526	–	–	2.0 (Goa)	4	–	–
1545–1570	8.5 (Diu)	3	2.5 (Goa)	3	–	–
Man/Servant						
1514–1526	–	–	1.3 (Goa)	158	2.7 (Kannur)	10,277
1545–1570	5.3 (Diu)	34514	–	–	–	–
Peon						
1514–1526	–	–	1.4 (Goa)	573	–	–
1545–1570	10.9 (Diu)	94	2.6 (Goa)	277	–	–
Torchman						
1514–1526	–	–	2.0 (Goa)	12	–	–
1545–1570	8.5 (Diu)	11	3.6 (Goa)	14	–	–

Source: See Tables 1.1 and 1.2.

Note: *Price of rice from Diu (1547) used as proxy.

1.10. TRENDS IN WAGE DEVELOPMENT IN INDIA IN THE LONG RUN

Finally, after all these exercises and considerations, we can now try to integrate the results for the first three quarters of the 16th century in the greater debate about welfare developments in India.

Table 1.12 Wage and Income Development of Unskilled Indian Workers, 1311–1650 (Expressed in Kg of Rice and Grain per Day)

Year	Locality	Rice Income and Wage		Grain Wage
		Total Income	Wage	
1311	Delhi		3.00	1.75
1514–1526	Kannur	2.70	2.22	2.13
1514–1526	Goa	1.40	0.82	
1545–1570	Goa	2.60	1.45	
1545–1570	Diu	5.30	3.89	
1595	Agra/Lahore		0.50	5.20
1610–1619	Surat			1.04
1620–1629	Surat			3.63
1630–1639	Surat			0.84
	Agra			2.22
1640–1649	Surat			3.11
1650–1659	Surat			8.76
1690	Surat			3.01
	Agra			1.99
	Bengal		3.43	

Source: See Table 1.11 and de Zwart and Lucassen (2020, Table 6).

Note: For comparison purposes, recalculated as equivalents of grain instead of a full basket of goods.

Therefore, we first have to distinguish between the availability of two types of cereal grains in India: due to climatic and environmental factors, sorghum, millet and wheat were the dominant diet of the common man in the north/north-west and rice that in the north-east, south and west.³⁶ That is why in Table 1.12 we have indicated the preferred local type of grain used by ordinary people. Taking this into account, as well as the higher nutritional value of rice, we clearly see that somewhere in the 1530s–1540s a substantial improvement in wages took place, except for possibly in the deep south.

How long this lasted is the big question for future research. Unfortunately, the data for the period between 1595 and 1690 are

full of uncertainties.³⁷ First, unlike previous data derived from Portuguese sources, they pertain only to wages, not to total income. Second, they are based on fewer observations and may thereby be rather volatile. Third, the provisional results of ongoing research in Portuguese sources for the period 1570–1640³⁸ do not reveal a clear continuation of the positive trend observed in the mid-16th century when there was a hike in real income. Therefore, we will refrain from drawing any firm conclusion regarding the follow-up of the trends found in this chapter. Until new Indian, Dutch, Danish, French or English sources become available for before the end of the 17th century, we will have to explore the as yet untapped but rich Portuguese-language sources for that period.

In this chapter, we cannot go deeper into the fascinating topic of skill premium, skills and their acquisition and the narrowly related apprenticeship and social mobility questions. However, this may lead us in the future to some possible explanations about income growth in mid-16th century India.

1.11. DISCUSSION AND CONCLUSION

Before suggesting possible backgrounds, and explanations for the welfare hike described above, we must briefly go back to our research methods. Without losing our excitement over the discovery of so many valuable sources for the reconstruction of income levels in South Asia in the 16th century, we must not forget the many steps that were taken to reach this point. And the more steps, the more chances there are for mistakes to occur: in transcriptions, in translations, in metrology and so on. We hope, however, that by publishing our results in this way, and by making our database available for other researchers, we have opened an interesting debate.

Finally, we want to address here briefly the possible background of the welfare growth that we believe to have demonstrated for mid-16th century India. In the available literature, we discern two lines of argument: the increased world trade and the favourable economic policy of the Sur dynasty and their Mughal successors. Both may have had positive effects on the economy that also included affected wage earners. Awaiting more detailed research, we will briefly sketch what we mean by this.

The increase of trans-oceanic shipping between India and Europe in the 16th century is a well-known fact, but its consequences for general income levels are less known. There is a strong tendency in world history to focus on its negative effects for non-European countries. This is, however, anachronistic for the 16th century. Without denying the greed and the brutalities of the Portuguese and their successors in densely populated South Asia, they were actually

merely a group of merchants among many and had to abide by the rules of the market and/or the constraints dictated by {...} strong states that were controlling the region. In these areas, where the additional money supply generated by this trade did not lead to inflation, the results could be positive (although often small as compared to the large size of these agricultural economies). (de Zwart & Van Zanden, 2018, p. 26; Palat, 2015, pp. 176–190)

This long quote seems to apply well to the west coast of India, where the remunerations structure of Portuguese settlements has been analysed herein. In particular in the north, the emphasis on a strong state applies. Although in the earlier years of the 16th century this still also goes for the Vijayanagar Empire in the south and the somewhat more northern Bijapur and other sultanates, it does apply most to the highly successful Suri Empire in the north (Asher & Talbot, 2006; Palat, 2015). Especially Sher Shah Suri (1538–1545)—nevertheless in his short reign—restructured the former Delhi Sultanate in a fundamental way. Among his important innovations were a fair administration of the land revenue, an efficient organization of the army, a sound uniform coinage based on the silver rupee and the copper paisa, the construction of great highways across the empire with regular caravanserais, grain stores, wells, milestones, etc., and planted with fruit trees. This was successful and far-sighted economic policy in *optima forma*. What is more, it was maintained and extended by his successors, the Mughals, among whom Akbar (1556–1605) was the most important.

A combination of these two fundamental changes in the Indian economy may well have had such positive effects on the economy as we see reflected in the increased real income of ordinary unskilled and skilled Indian labourers around the middle of the 16th century.

Appendix 1.1 Average Nominal Income Entries for Skilled and Unskilled Workers in Western Coastal India, 1514–1570
(in Reais per Day)

	North-western								Centre	
	Diu	N	Daman	N	Bassein	N	Chaul	N	Goa	N
Skilled (European)										
1514–1526	–	–	–	–	–	–	47.6	6	36.0	1
1545–1570	90.8	65	82.1	63	77.9	109	66.4	28	91.1	178
Unskilled (European)										
1514–1526	–	–	–	–	–	–	–	–	–	–
1545–1570	41.6	86	34.1	76	38.8	11	42.7	2	80.0	84
Skilled (Local)										
1514–1526	–	–	–	–	–	–	57.3	3	21.3	140
1545–1570	24.5	405	35.7	411	36.8	26	36.5	3	27.3	134
Unskilled (Local)										
1514–1526	–	–	–	–	–	–	–	–	9.6	767
1545–1570	15.7	34,880	12.7	232	11.9	450	14.0	37	21.3	16,454

(Appendix 1.1 Continued)

(Appendix 1.1 Continued)

South-western											
	Basur	N	Kannur	N	Cranganore	N	Calicut	N	Kochi	N	Kollam
Skilled (European)											
1514–1526	–	–	33.2	13	–	–	–	–	–	–	–
1545–1570	89.1	10	69.4	21	82.0	5	–	–	95.2	67	74.1
Unskilled (European)											
1514–1526	–	–	–	–	–	–	–	–	–	–	–
1545–1570	–	–	49.5	2	32.9	1	–	–	57.6	–	32.1
Skilled (Local)											
1514–1526	–	–	20.1	8,005	–	–	15.09	6	–	–	–
1545–1570	30.0	2	25.1	7	51.6	16	–	–	34.8	–	24.0
Unskilled (Local)											
1514–1526	–	–	16.8	10,295	–	–	18	6	–	–	–
1545–1570	10.3	12	15.3	4	15.7	3	–	–	16.3	18	15.3

Source: ANTT, NA, n^o. 622–623, 755, 760, 876; ANTT, CC, Part II, mç. 136, doc. 19; B. A., Cód. 51-VII–8, fls. 1–197; B. A., Cód. 51-VII–19, fls. 262–265v; Botelho ([1554]1868); de Jesus (2012b); de Matos and Lucassen (2019); Pissurlencar (1951).

NOTES

1. Some small modifications will be explained below; in addition, we have supplied income estimates.
2. In this figure, and in this study, we have not used the Portuguese names, but rather the modern spelling, with two exceptions where we have maintained the conventional historical name as the divergence with the modern name is rather wide: Calicut (now Kozhikode), and Kochi (Port. Cochín, now Kodungallur).
3. In a further study, we will explore the very rich archival evidence on wages after 1570, available from Portuguese sources. For comparative reasons, we also will consider wage data for the Portuguese settlements on the coast of East Africa available from the early 16th century onwards.
4. In the original: *um mínimo de territorialidade efectiva e um máximo de âmbito geográfico abarcado*.
5. Under the legal principles of *mare clausum*.
6. According to Disney, the population of Goa in the early 17th century was approximately 75,000 individuals, with a maximum of 5,000 Portuguese individuals, including the *casados* (Portuguese settlers), military officers and clergy. 'In smaller possessions the Portuguese population was far less, usually comprising no more than a few hundred persons or even a few score, who lived clustered round the fort. Everywhere the overwhelming majority was non-Portuguese' (Disney, 2009, p. 2, 149).
7. With the exception of Bassein, where local income was largely based on farming (Disney, 2009, p. 2, 156).
8. 'Seco' means dry, referring to a 'passo' situated inland, in contrast to the others, located next to rivers.
9. An extensive report of these *tanadarias* and its several villages for the end of the 16th century is to be found at *O Tombo de Damão 1592* online at <http://cvc.instituto-camoes.pt/conhecer/biblioteca-digital-camoes/historia-1/2419-2419/file.html>.
10. Images that illustrate our point can be found at https://en.wikipedia.org/wiki/File:Codice_Casanatense_Maynatos.jpg
11. *Naire* was a member of the noble class and a military. Possibly *iti* is a subdivision of the *naire* caste, see the following entries: *itinaire*, *itiquila*, *itiunirama* and *ity*. (Dalgado, 1983)
12. Research needs to be carried out to determine if one or more of these contain a personal name.
13. There is also one entry for a forced sailor (*forçado*).
14. In our sources, slaves are mostly employed by the government, but sometimes we also encounter private slave owners, which,

remarkably, are nearly always sailors and caulkers apart from an occasional master cooper and copper smith. In our analysis, we assume that these private slaves assisted their masters in their respective occupations.

15. We prefer this interpretation because otherwise they would have been called *mulheres para serviço dos homens*. Note that the Portuguese authorities, on the one hand, condemned prostitution by Christian women but, on the other, preferred sexual service to soldiers by Christians over non-Christians (Hindu, Muslim) women.
16. About these institutions, see Miranda (2007, pp. 33–55).
17. ANTT, *Contos do Reino e Casa*, Núcleo Antigo, n.ºs. 755 [for Calcut, 1514–1515] and 760 [for Chaul, 1514–1516]; de Matos and Lucassen (2019).
18. ANTT, NA, n.º. 876. doc. 35 [c. 1520]; ANTT, CC, Part II, mç. 136, doc. 19 [1526].
19. ANTT, NA, n.º. 622 [Goa, 1531]; ANTT, NA, n.º. 623 [Kannur, 1532–1533].
20. B. A., Cód. 51-VII-8, fls. 1-197 (Book of *mercês* made by Dom João de Castro, governor of *Estado da Índia*, 1545–1548).
21. About the context of the siege, see de Jesus (2012a).
22. B.A., Cód. 51-VII-19, fls. 234–244. Published in de Jesus (2012b, pp. 233–243).
23. B.A., Cód. 51-VII-19, fls. 262–265v (*Trelado das fereas que ho feitor Antonio Gill {...} pagou a jemte da tera guzarates*). Transcribed within the project *LEW-PIO (1500–1650)*.
24. For instance, the wage of an officer in the year of 1565 would consider at least the last five years (i.e., since 1560).
25. For the importance of the terms used to indicate different types of remunerations in contemporary Europe (including Portugal), see Beck et al. (2014).
26. Besides regular workers and officials, *mantimento* was also given to slaves and to a variety of dependents, including prostitutes and children (de Souza, 1994, p. 156). Batta in Kannada is ‘paddy’ (in Portuguese *bate*).
27. *Biscoito* was mainly produced with wheat flour, as mentioned by Guinote et al. (1998, pp. 56–57). It was boiled three or four times in a row in order to be preserved longer than bread. We do not know whether this process affected the caloric content of wheat and, therefore, we have left this out of consideration here. For 1 kg of *biscoito*, 1.45 kg of wheat are needed.
28. B. A., Cód. 51-VII-19, fls. 234–244. This food cost 2 *reais* per day, the same sum that was spent for slaves in Kannur in 1517 (see

Table 1.9 and the adjoining note on this issue). As Table 1.11 makes clear, this represents totally different amounts of rice.

29. Black Rice (*Oryza Sativa*, Lin.) contains 354 calories per 100 g; see Saunders and Betschart (1979). King fish (*Scomberomorus Cavalla*, Cuvier, 1829) contains 101 calories per 100 g; see <http://www.catalogueoflife.org>.
30. Calculations based on ANTT, CC, I, mç. 30, n° 96; mç. 31, n° 146: these daily rations contain 1971 calories for *biscoito*, 3,560 for white rice and 323 for butter. See Saunders and Betschart (1979) and Muehlhoff et al. (2013, p. 67 [Table 3.7]).
31. The slight change in the chronology is due to the inclusion of the maintenance book for Kochi, 1507.
32. Regarding the siege of Diu, see de Jesus (2012a).
33. Prices calculated from B. A., Cód. 51-VIII-19, fls. 235v-242.
34. ([...] Esta terra [Bassein] he tam barata [...]). Letter of António Gomes S. I. to Simão Rodrigues, General of the Portuguese Jesuits [20th December 1548] in *Documenta Indica*, ed. Joseph Wicki (Rome: Monumenta Historica Societatis Jesu, 1948-1988), vol. I, pp. 409–426 [doc. 59].
35. A careful check of the data as represented in de Matos and Lucassen (2019, p. 123, Table 4) reveals that there are, in fact, two different entries for maintenance money, the first time paid out to 70, and the second time to 75 enslaved sailors, respectively, 2.02 and 20.03 reais per person per day.
36. Mahajan et al. (2017, pp. 53–91). Historians of real wages and income can safely take the lowest priced grain in any particular situation as the prevailing staple food.
37. That is also why we have recalculated only a small selection of the data from de Zwart and Lucassen (2020) only to provide a first impression for what was happening in the 17th century.
38. By the authors of this chapter, together with Pim de Zwart (Wageningen University).

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WAGES AND PRICES IN MADRAS C. 1650–1720

Radhika Seshan

This chapter is a preliminary exercise into examining the English factory records of Madras, particularly of the 17th century, to see what kind of information regarding prices and wages can be gleaned from them. It has often been assumed that these records have been so extensively used that there is nothing much more that can be got from them; but here too, a different perspective yields a great many results. For example, Broadberry and Gupta (2006, p. 12) while pointing to the need to rely ‘in some years on data for unskilled and skilled weavers’ do not explain what is meant by an unskilled weaver, nor the primary sources on which this statement is based. Both the Dutch and the English records for the 17th century give some details on wages given to the weavers in the region around Masulipatam and Pulicat (Dutch), and near Cuddalore and Kumimedu (English). A comparison of this data would perhaps be helpful to fill out the picture a little more. It is also noticeable that, while for North India much of the information is for the 16th century, for South India, it is mainly for the post-1740 period. This chapter therefore takes a fairly narrow time span and concentrates on the earliest fort of the English in India, Fort St. George and the town of Madras/Chinnapatnam adjoining it; or, as termed in the records, ‘Our fort and city of Madras’.

The English got the grant for the area that became Fort St. George in 1639 from the Nayak (the ruler) of the region. Late in

1640, they reported that 'Portugueses and mestizas' (Love, 1913, Vol. I, pp. 34–35) had moved to the vicinity of the fort from San Thomé, the Portuguese settlement that lay some three miles to the south of the fort, and that some 300 or 400 families of weavers had also moved to Madras. In 1647, we find some slightly negative references to the population of the city, for it was declared that, as a result of the famine that had affected the coast from 1645, 4,000 people had died in the town of Madras, so that only one-third of the earlier population was left in the town (Love, 1913, p. 75). In 1673, Dr John Fryer (1698) reported that there were about 300 Englishmen and about 3,000 Portuguese who lived in White Town (the European part of the settlement, including the fort itself and the houses within the walls encompassing the settlement). However, other than saying that there were many merchants and 'natives', he does not give us any indication of the actual numbers. The prosperity of at least some of the merchants is clear from the records, especially those relating to a chief merchant named Kasi Viranna, who, among other things, in 1674, rented the town of San Thomé from the Golconda government for an annual rent of 1,300 pagodas.

Given that it was an English settlement, the information regarding wages is mostly geared to the wages paid to the various English officials and soldiers employed in and around the fort. So it is with prices—the prices that are most clearly and most regularly given are of textiles of different kinds. However, this is not the only data that one gets. Luckily, however, we also find wages paid to Indians. By 'Indians' here is meant mainly those listed in the records under various names: *muckwaes*, from the word *machua*, meaning fishermen, but used in the records to describe boatmen of different kinds; *conicoplys* (Tamil *kanakkupillai*, accountant), *vakil* (agent, usually at the court), as well as the occasional reference to 'our black soldiers', apparently Indian soldiers appointed in the local militia, not on a permanent basis, but during exigencies (such as during the siege of San Thomé by the Golconda troops, 1672–1674). While no European 'boatmen' or accountants existed, the few references to black soldiers do not indicate that they were paid any less than their European counterparts.

A limited amount of information is available for the period 1640 (the establishment of Fort St. George) to 1672, as a fire

destroyed many of the records of those years. Therefore, and because it was after the 1670s that more efforts were made to assert English control and regulate the workings of the establishment there, almost all of our information belongs to the years from 1672 onwards.

2.1. WAGES

The wages of the different English factors sent out to Madras were fixed by the Court of Directors of the company in London. In 1675, these were fixed as follows: apprentices, £5 per annum for the first five years and £10 for the last two years of their apprenticeship. They were then promoted to become writers and, after a year in that function, they were promoted to be factors, at a salary of £20 per annum. Above the factors were merchants, paid £40 per annum, and then senior merchants at £50 per annum. In each factory was a governor and the second and third of the Council, who were paid £300, £100 and £70, respectively (Love, 1913, p. 393).

In addition, these high officials enjoyed a number of important allowances (see below) plus some perquisites, one being the permission to trade on their own accounts and freight their goods back to England on the Company's ships without paying any charges. The wages paid to officials below these high ranks can be divided into two broad parts, one being to the soldiers of the fort, and the other to the various functionaries of the city, such as boatmen, watchmen and tax collectors.

While a garrison had been established fairly soon, our first indication of the payment to soldiers comes in 1654. In that year, it was stated that 'The Townes people did pay 20 Reals towards the maintenance of 20 Soldiers to watch the Towne and serve the Fort...' (Love, 1913, p. 142). The internationally circulating real or Spanish dollar (also called piastre, a coin containing 24.6 g of pure silver) at the time might equated to half a gold pagoda (a coin weighing about 3.4 g) (Dodwell, 1921). In view of the next example, we may suppose that this was equal to 18 *fanams* and therefore a monthly, rather than annual, pay per soldier. This isolated and early recording of wages for Madras finds some confirmation from a place on the northern Coromandel Coast. In 1660, the English factory at Veeravasaram, just north of Masulipatnam, used to pay

‘2 d. per diem, which is the rate we give to all day labourers and porters we usually employ to carry burdens’. If we convert these two pennies according to the Madras exchange rate of 15 years later (see Table 2.1), this means a monthly wage of 20 *fanams* (Foster, 1921, Vol. X, p. 261).

In 1675, Ensign Betts, judging from his name an Englishman, had his salary raised to 300 *fanams* per month (the currency on the Coromandel Coast was usually calculated in terms of pagodas, *fanam* and cash; 80 cash made one *fanam*, and 36 or 38 *fanam* made one pagoda (Love, 1913; Seshan, 2012). The source also states that this was an extraordinary case as this amount was to be paid to him keeping in mind his ‘long and faithful service’ to the Company, which indicates that this was out of the ordinary. To get an idea what was a normal soldier’s pay, we have to see some more lists from the same time period up to the early 18th century.

To begin with one (including an ensign) from the same year, a small party of soldiers was sent from Fort St. George to Masulipatam. For this party, the payment was 10 pagodas to the captain, 125 *fanams* to the Corporal, 120 *fanams* to the surgeon’s mate and 91 *fanams* to the private (Love, 1913, pp. 378–379).¹ However, a little later, military payment scales were modified, and it was declared that

Lieutenants to have 4s per Diem, the usuall pay of Lieutenants, the Ensigns to have 3s per Diem, the usuall pay of Ensigns, and Sarjeants 18d per Diem, the usuall pay of Sarjeants, the said pay to be reckoned at 9s to the Pagoda, 3d to the Fanam [...].²

Table 2.1 will demonstrate more clearly for the modern reader what this complicated rendering of wage data entailed. It suggests that the lowest military ranks earned less than 100 *fanams* per month, but subaltern officers and officers earned substantially more.

Next, in 1681, we get a fairly detailed list of men employed as soldiers at Fort St. George along with their salaries (Seshan, 2016).³ Apart from the wage sums themselves, most interesting for us is the distinction between those occupied in the ‘Christian Town’, that is the main fort area, where the Europeans lived, and those occupied in the ‘Malabar Town’, most likely referring

Table 2.1 Payments to Soldiers, Madras 1675

Original Pay List			Revised Pay List			
Rank	In Indian currency <i>pa : fa</i>	In English currency <i>£ : s : d</i>	Rank	In Indian currency <i>pa : fa</i>	In English currency <i>£ : s : d</i>	
	Per month	Per month		Per month	Per month	Per day
Captain	10 <i>pa</i> = 360 <i>fa</i>	4: 10: 0	lieutenant	480 <i>fa</i>	6: 00: 0	0: 4: 0
Corporal	125 <i>fa</i>	1: 11: 3	ensign	360 <i>fa</i>	4: 10: 0	0: 3: 0
Surgeon's mate	120 <i>fa</i>	1: 10: 0	sergeant	180 <i>fa</i>	2: 05: 0	18 d = 0: 1: 6
Private	91 <i>fa</i>	1: 02: 9				

Source: The Author. Calculated on the basis of the Records of Fort St. George: Diary and Consultation Book of 1720.

Note: 1 £ = 20 s = 240 d; 1 pagoda = 9 s = 108 d; 1 *fanam* = 3 d; so 1 pagoda = 36 *fanams*; our own calculations in italics.

to the lower walls surrounding part of the Black Town, particularly the parts nearest to San Thomé, which was originally the Portuguese settlement but was later captured by the French (in 1672) and taken from them by the Golconda troops (with Dutch help) in 1674. Although all of them bear a Portuguese name and, therefore, must have been Catholics, this does not tell us necessarily something about their ethnic origin. These data therefore may indicate that, unlike in the late 18th century and certainly in the 19th century, soldiers of Indian origin were not paid less than those of European origin, but rather the opposite. Whatever the case may be, interpreting these sums as annual salaries means that the monthly pay of ordinary soldiers in that year varied between 45 and 63 *fanams*.

A third example dates from the end of that decade and, luckily here, we also find non-military wage earners. In 1688, a gunner's mate was appointed at a salary of 6 pagodas per month, while 'peons and servants that look after the Rt. Hon'ble Company's factory' at Madapollam (near to Masulipatam, in present-day Andhra Pradesh) were paid 16 pagodas for five months.⁴ Again, recalculated in *fanams*

Table 2.1a Annual Salaries Paid to Portuguese Soldiers in Fort St. George (Described as the Christian Town in the Records), 1681

<i>Name of the Soldier</i>	<i>Where in the Fort</i>	<i>Amount in Pagodas</i>
Joan Sardinia de Fonseca	St Thomas Bulwark	16: – : –
Ant Nogueira de Souza	Charles Bulwark	15: – : –
Joan Perera de Faria	James Bulwark	15: – : –
Cosmo Laurenzo de Madera	the Choultry Gate	17: – : –
Gaspar de Moto de Brito	the Middle Gate	17: – : –
Lucas Luis de Oliveira	St. Peter's Bulwark	15: – : –

Source: The Author. Calculated from the Records of Fort St. George: Diary and Consultation Books, 18 April 1681.

Table 2.1b Annual Salaries Paid to Soldiers 'in the Malabar Town' (i.e., in the Indian Part of the Settlement), 1681

<i>Name of the Soldier</i>	<i>Where in the Town</i>	<i>Amount in Pagodas</i>
Ant Lewis de Vallo	the Corner Bulwark	24: – : –
Ant Pallia de Lima	the Bridge Gate	20: – : –
Gaspar de Cunha da Sylva	the Bridge Bastian	20: – : –
Bernardo Medan	the Cape Bulwark	20: – : –
Antonio Francisco	the Garden Gate	20: – : –
Manuel de Fonseca	the Fauloon Bastian	20: – : –
Francisco Carneiro dal Cassova	the Chitty Gate	20: – : –
Francisco de Brito Conea	the Sea Bulwark	21: – : –

Source: The Author. Calculated from the Records of Fort St. George: Diary and Consultation Books, 18 April 1681.

per month, it entails 115 *fanams* for common soldiers as well as workers and twice as much for a slightly higher positioned subaltern.

At the end of the century, we find a fourth case, again for non-military personnel. In 1692, it was recorded that in Fort St. George, the salaries of the peons, which had been raised during the period of famine, should be reduced to 20 *fanams* per peon.⁵ In the light of

the foregoing, this will have been 20 *fanams* per month for peons. Even more interestingly for wages in real terms or for the purchasing power of all these wages is that, in the same year, arrangements were also made for what seems to be a mess hall for the soldiers. There, two meals per day were to be provided at 60 *fanams* per soldier; this amount was to be deducted from the soldiers' salaries each month. The person who organized the hall and the food was to supply 'sufficient good provisions as beef mutton pork fish, pelow and rice with a dram and punch sometimes' and this was to be given '1½ measures of rice per *fanam*', as well as whatever other provisions the company's warehouse keeper could provide at the market rate.⁶ This means that, in that year, the necessary food needed per soldiers was reckoned to be 60 *fanams* per month, while his actual salary was higher. In this light, the new wage standard of 20 *fanams* for a peon sounds miserable.

Fifth and finally, a full and long list of occupations and their wages is available for 1709, this time not from Madras itself, but from Golconda, another important capital in the South at 500 km north-west of Madras (Table 2.2).

Again, in the light of the evidence from preceding decades, we must suppose that these wages were meant to be annual. The lowest wages were given to a group of 30 peons (1.5 pagodas or 45 *fanams* per month). Their placement in the list immediately after the coolies—if compared to many more wage lists from northern India—strongly suggests that these are boys (and maybe also women) who assisted the coolies (de Zwart & Lucassen, 2020). If that interpretation is acceptable, we only find four different main wage categories for men, not diverging too much from each other: 53 men (including servants, horse attendants, grasscutters, *parriars* and washermen) at 2.5 pagodas or 75 *fanams* per month, followed by 22 men (including 4 cooks and 4 *puckalls* who fetched water, carried by bullocks) at 90, 6 men at 97.5 and 203 men, nearly all coolies at 105 *fanams* per month.

2.2. COST OF MAINTENANCE

Our outline of wage data in 1692 already gives us an indication of the kind of information that may be helpful to put nominal wages in a meaningful perspective. These are the costs of maintenance

Table 2.2 Annual Wages Paid Out by the Company's Army at Golconda 1709

Account of the hire of peons, cooleys & c. by Mr Lewis and Mr Berlu, Taking the King's Present to Golconda, 17 February 1709 (all payments calculated in pagodas)	
600 coolies out of which 200 here at 3½ pa each	700
50 peons out of which 30 here at 1½	45
2 smiths	6½
2 carpenters	6½
10 horse keepers	25
10 grasscutters	25
3 <i>conicoplys</i> *	10½
1 <i>muchee</i> **	3
2 cobblers	6
10 servants for Mr Lewis and Mr Berlu	25
6 servants for Mulla and Paupia (the Brahmin)	15
1 servant for Mr Way	2½
2 servants for the doctor	5
10 <i>frosses</i> **	30
1 servant clock maker	2½
2 <i>sakers</i> **	12
4 cooks	12
1 comprador	3
1 butler	3
4 <i>parriars</i> ***	10
4 packers	10
1 flagman	2½
1 barber	2½
2 armorers	6½
3 washermen	7½
4 oxen men or <i>puckalls</i>	12
Mulla to be allowed batty of ₹6 per day and the Brahmin ₹4 in consideration of the prodigious scarcity of provisions on the road	

Note: *Tamil *kanakkupillai*, accountant; **no information on what these words mean; ****Pariah* usually used to refer to a scavenger.

calculated by the authorities and often appearing in the sources as wages in kind. We mentioned it already for 1692, and we will supplement this information with additional and similar data here.

According to custom, there were certain rights that the temple attendants at the fort, the head of the watchmen and the measurer were granted. In 1672, these were spelt out by way of both the right and the amount to be paid. Goods came into the city in three ways: by sea, by a road near the paddy *banksall* (granary for rice) and through the 'Choultry Gate' (the gate at which the land customs were collected). Customary rights were levied on specific goods that came in by road through the last two. Thus, there are details about how the temple was to receive 'one measure' for each heap of paddy, and how the *peddanayak* (head of the watchmen in the city) was to get $\frac{3}{4}$ of a measure for a large ox load and $\frac{1}{2}$ of a measure for a small ox load. At the Choultry Gate, through which apparently other kinds of grain and oil seeds came in, the temple was given one handful per sack and the *peddanayak* two handfuls per sack. The Company made no claim on these allowances but stated that, in case of any violation, a fine of 12 pagodas would be levied, payable to the Company. The Company received a share of only one of the many customary allowances—that of fish that were caught either with a net or a hook (Table 2.3).

Unfortunately, it is impossible to deduce from these rights what they meant in real terms for the lucky functionaries who were entitled to them. However, we can perhaps compare these to similar rights enjoyed by the English employees of the Company. Apparently, over and above the salary and the perquisites mentioned earlier, they were given allowances for house rent and for food called 'diet' in the records. In 1677, following a request from the employees who said that the allowances were insufficient for them, the decision was taken to increase the allowances. These went up from 4 pagodas per month in 1672 to 10 pagodas per month for the senior members of the council and 4 pagodas or 144 *fanams* for lower officials (Table 2.4). We do not know what the house rent allowance was earlier but, in 1677, it was raised to 4 and 3 pagodas, respectively. As a point of comparison, it can be noted that at Masulipatam (500 km north of Madras), in 1674, diet allowance had already been made 8 pagodas per month, with an

Table 2.3 Customary Rights or Allowances in 1672⁷

1672					
	Temple	Peddanayak	Right-hand Side Girls	Measurer	Company
Allowance at the paddy Banksall	1 measure of paddy per heap of paddy	¾ measure per great ox load;	2 handfuls for every heap	½ measure per pagoda	
		½ measure per small ox load			
Allowance at the Choultry Gate for different kinds of grains and oil seeds	1 handful per sack	2 handfuls per sack	1 handful per sack	1 handful per sack	
Allowance of cow dung	2 cakes per basket	5 cakes per basket			
allowance of sea fish		10 per great net of sea fish			5 per great net of sea fish
		1 per 5 fish caught with the hook			1 per 5 fish caught with the hook

Source: Records of Fort St. George, 13 August 1672.

addition of 2½ pagodas per month per servants, something which is not mentioned in the Madras records (Table 2.5). These allowances have to be seen against the background of the famine that affected this region from about 1674 onwards.⁸ Prices of all commodities at Masulipatam rose sharply at that time but seem to have risen at Madras only about a year or two years later. Madras apparently

Table 2.4 Allowances for English EIC Employees at Madras, 1672–1678

	<i>Rank</i>	<i>Diet</i>	<i>House Rent</i>	<i>Servants</i>	<i>Horses</i>
1672	Senior English employees	4 pagodas		1.5 pagodas	
1677	2nd and 3rd Councils if married	10 pagodas per month	4 pagodas per month		
	rest of Council if married	8 pagodas per month	3 pagodas per month		
	Surgeons if married	4 pagodas per month	2 pagodas per month		
	Factors if married	4 pagodas per month	2 pagodas per month		
1678	English soldiers and factors				50 <i>fanams</i> per horse per month

Source: Records of Fort St. George, 12 February 1677.

Table 2.5 Allowances in Pagodas at Masulipatam, pre-1674 and 1674

	<i>Diet</i>	<i>Servants</i>
Pre-1674	4	1.5
1674	4	2.5

Source: Records of Fort St. George.

got supplies from southern Tamil Nadu (the ‘southwards’), an area which was hit by the famine rather later.

We may conclude that the daily provisioning of food and drinks for high European officials in the 1670s was calculated at a minimum at 4 pagodas or 144 *fanams* per month, substantially more than the sums that we have seen before for Indians.

Having reviewed all available data for wages and allowances, we can now summarize what the general trend was over this period, in which we will concentrate on the lowest ranks of society, if only they represent the largest number of inhabitants (Table 2.6).

Table 2.6 Wages and Food Rations (between Brackets) of Ordinary and More Skilled Male Wage Labourers (Military/Civil and in the Labour Market), Tamil Nadu 1654–1709 (*Fanams* per Month)

	Place	Military and Civil Servants		Labour Market	
		Soldier	Subaltern	Minimum	More Skilled
1654	Madras	18 (wage or diet)			
1660	Masulipatnam			20	
1672	Madras			54 (diet)	
	Masulipatnam		144 (diet)	54 (diet)	
1674	Masulipatnam		144 (diet)	90 (diet)	
1675	Madras	91	120–180		
1677	Madras		144 (diet)		
1681	Madras	45–63			
1688	Masulipatnam	115	216		115
1692	Madras	60 (diet)		20 (down from a higher level)	
1709	Golconda			75	90–105

Source: The Author. Calculated on the basis of information from the Records of Fort St. George.

Even if it is allowed to take the area of Madras, Masulipatnam and Golconda in the second half of the 17th century as one unit, it is not easy to draw firm conclusions from all the data collected so far. It is clear, however, that we are dealing here with a market economy in which nominal wages per occupational category could fluctuate heavily over time. Comparing nominal wages and ‘diets’, that is, money spent on food of wage earners, we get the impression that these wage fluctuations are caused by fluctuations of market prices of primary food, particularly grains. As long as no long-term price series for grains are available for this region, we have to look at other goods to understand what was happening with real wages. We will try to do so in the next section of this chapter.

One problem that we face in the records when we want to study prices is the multiplicity of weights and measures that we

find. The words that are used are *parra*, *calums*, *mercalls*, sacks and handfuls. These are in addition to *ser* or *seer* (0.93 kg), *maund* (approximately 37 kg) and candy (approximately 254 kg). We have no idea about the modern equivalence for the first three and candy also seems to have been very variable. To calculate prices on a fairly uniform scale thus becomes very difficult. The first three are not used at all in contemporary times, but *parra* used to be a measure of approximately half or three-fourths of a *ser* in some parts of Kerala.⁹

There is a considerable amount of scattered information about prices, their regulation and about cheating in the market. What little information is available on prices of commodities is to do with rice and especially with its high prices that occurred regularly, but occasionally also with other items such as pepper and turmeric. The first mention of rice comes in 1654. At this time, it was stated that because of the famine, many people came to provide Fort St. George with rice. It should be remembered that this was in many ways a guaranteed market where all the rice that had been brought would be sold, either to those in the town itself or to those who came to trade there. The English declared both now and later that it was because of their insistence on fair practices, or at least of taking action against unfair practices, for the first case of cheating also comes in 1654. A complaint was submitted to the Company from the painters and weavers of Black Town (Chennapatnam, the part of Madras where the Indians lived) against two brothers who were the chief merchants of the Company. It stated that the two merchants had 'the Braminees made a great Parra, and measured the Graine (brought by severall men) by it into the Bancksall, and at Sale deliver'd it to the buyers in a small parra' (Love, 1913, p. 147).

The second mention of rice refers to expensive imports in 1676 from Bengal being available for 'half a rupee the Bengala maund of seventy five pounds, avoirdupois'¹⁰ and this is compared to the price of the rice of Milan in London ('22s per cent', but the reference is none too clear).

The third mention of rice has to do with a different kind of coercion, when in 1679 the Golconda collector of regional revenues demanded that all rice be sold in the markets of Madras at '10 *calums* for a pagoda' instead of 12 at which it was then being sold. They

also tried to put a stop to the rice coming into the town and set up rice markets at two villages just outside, Vepery and Egmore (today both part of Madras city), from where the merchants had to buy the rice.¹¹ At a meeting of the Council of Fort St. George, it was decided that the local governor's orders would not be followed and, if necessary, the Company would send out a small force against the local governor to make it clear that he could not dictate terms to the Company. Apparently, this was not required, at least at that time. In 1693, measures were taken to control the price of rice, for it was

ordered that Paddy be sold att the Sea Side for 24 or 25 Mercall for a Pagoda: and the said Paddy att the Banksall att 25 & 26 for a Pagoda: till further order and Rice to be sold att a rate proportionable to the prices of Paddy: according to the Goodnesse...¹²

This information on expensive daily food at times confirms what we saw before when discussing real wages, but it is not sufficient to say more about the intake of calories.

Prices of other foodstuffs are available only intermittently, and very often not from Madras alone, but unfortunately we do not get information on the same product for consecutive years or even after a gap of years. The only exception, and a very small one, is of pepper—the price of pepper rose from 18 pagodas per candy in 1676¹³ to 22 pagodas per candy in 1720.¹⁴

Revenue was also collected on the retail prices of liquor. In 1679, when the liquor licence was to be renewed, it was stated, among other things, that wine should be sold at no more than ‘ $\frac{3}{4}$ of a pagoda the pottle bottle [a measure of two quarts or $2 \times 1.136 = 2.272$ litres], English beer not exceeding 6 *fanams* the pottle Bottle, Mum [also a beer] not exceeding 8 *fanams* the quart Bottle’ and a great deal more.¹⁵

2.3. PRICES OF LOCALLY PRODUCED TEXTILES

As is to be expected, the maximum information on prices comes from textiles. They are not only important for understanding price fluctuations in general but also as an indicator of the earnings of an important occupational group, the textile weaver (Parthasarathi, 2001; Riello & Parthasarathi, 2009). Given that the textiles were for shipping to England, and that the effort of the English was always

Table 2.7 Price of Cotton, Madras 1671–1712

Year	Pagodas per Candy of Cotton
1671	9
18 April 1672	15 (excepting Madras)
June 1672	14
1710	15
1711	15
1712	20

Source: The Author. Calculated on the basis of the records of Fort St. George for the relevant years.

to reduce the prices of the textiles that they bought, the records are full of information on negotiations with the merchants to get supplies of cloth at lower prices than the previous year, not always successfully. But the prices do reflect the conditions that existed in the region, not only of the weavers but also of the farmers as far as they cultivated cotton. Table 2.7 gives us the price of cotton, showing clearly that the price rose considerably between 1671 and 1712.

Prices of different types of cotton cloth also show a variation over a period but at a different pace. It is interesting that most show a peak already in 1701 and then a fall in some types of cloth later (long-cloth and *salampore*), but not of all (like *morees*; for *betellas* and gingham, later prices are lacking) (see Table 2.8 and Figures 2.1–2.3). One possible reason for the variation in prices shown in Madras is the warfare that affected the region from about 1690 till almost 1710, making movement of supplies difficult. In the same years, a comparison with the prices at Fort St. David (Cuddalore) and at Madapollam (which has not been done in this chapter) would perhaps help in understanding price fluctuations in the region. In addition, it should be remembered that in this period, investment in Bengal was beginning to outstrip that in any other part of the country. Famines, local warfare or, as I have suggested elsewhere (Seshan, 2012), an inability of the merchants to come to terms with the newer political dispensations, and a move to the Maratha controlled regions may also have influenced price fluctuations.

Table 2.8 Prices of Different Types of Cotton Cloth, Madras 1674–1701

Name of Textile	Year	Measurement in Coved		Number of Pieces Required	Price (Per Corgo of 20 Pieces)	
		Length	Width		Pagoda	Fanam
Longcloth (Ordinary)	1674				23	27
	1676				23	27
	1688	–	–	–	22	–
	1699	72	2¼	15,000	34	–
	1700	72	2¼	30,000	34	–
	1701	72	2¼	20,000	36	1
	1720				13	18
Salampore (Ordinary)	1674				11	18
	1676				11	18
	1688	–	–	–	10	25
	1699	32	2⅛	10,000	16	18
	1700	32	2⅛	4,000	29	–
	1701	32	2⅓	4,000	30	26
	1720				14	18
Morees (Ordinary)	1674				12	18
	1676				12	18
	1699	20	2½	8,000	20	–
	1720				19	
'Betellas Oringal' (Warangal)	1699	32	2	5,000	70	–
	1700	32	2	6,000	70	–
	1701	32	2	7,000	74	7
Gingham	1674				32	18
	1676				32	18
	1688	16	2	–	23	–
	1699	16	1⅞	1,000	32	–

Source: The Author. Calculated on the basis of information from the Records of Fort St. George.

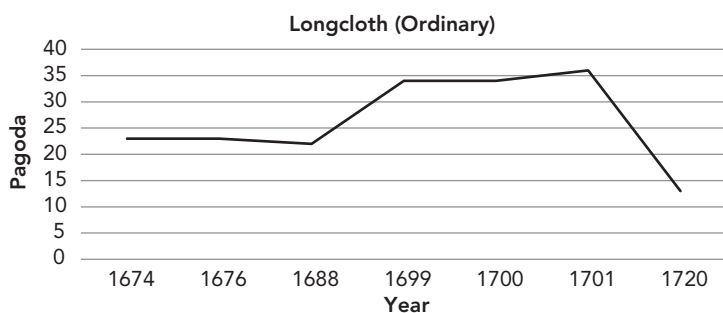


Figure 2.1 Price Fluctuations of Ordinary Longcloth (Pagodas per Corge), Madras 1674–1720

Source: The author.

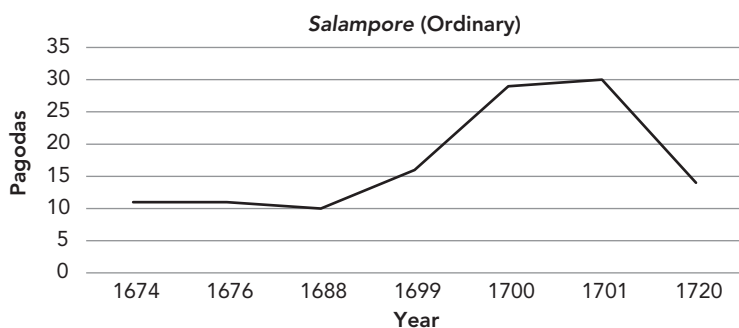


Figure 2.2 Price Fluctuations of Ordinary *Salampore* (Pagodas per Corge), Madras 1674–1720

Source: The author.

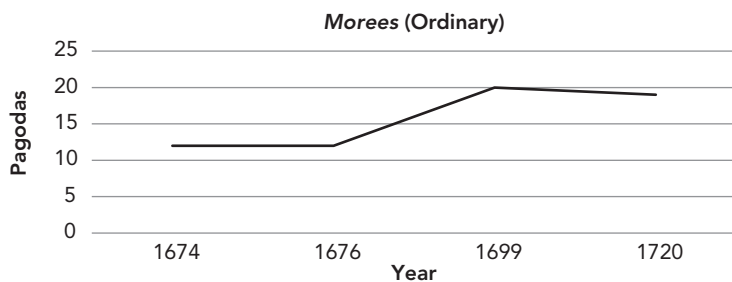


Figure 2.3 Price Fluctuations of Ordinary *Morees* (Pagodas per Corge), Madras 1674–1720

Source: The author.

Given below are figures of three types of cloth for which most information is available, which demonstrate this trend clearly.

These long-term price movements of cotton and cotton cloth need to be understood in the context of both political and economic conditions prevailing at the time. In the earlier years, as can be seen from the table on cotton, the price of the raw material itself rose sharply. For the later years, we get no information on the price of cotton, but a great deal on the trouble involved in getting the cloth from the weavers, because of the movement of armies in the region. Prices of cloth had to take into account the transport costs as well; and, by 1720, there was a lull in the warfare that had affected the region from the late 1680s. In sum, increasing prices of cotton may indicate an improvement of the incomes of farmers who produced it, but increasing prices of cotton cloth not necessarily rising incomes of weavers. However, this needs to be studied further.

Telling for the economic problems of many in the last quarter of the 17th century is also the failing sale of English goods to the Indian merchants. Here again, there was a small increase in the price of goods bought by the Indian merchants between 1673 and 1674 (see Table 2.9), but between 1675 and 1680 the Indian merchants refused to buy either lead or copper, saying that what they had bought was still unsold.¹⁶ The lack of demand for European goods is also clear from the fact that items like broadcloth, brought from England, were used primarily as gifts to the nobility, and not for sale in the Indian markets.

Table 2.9 Prices of English Goods (Pagodas per Candy) Taken by the Indian Merchants, Madras 1673–1674

	1673	1674
Brimstone	10	11
Copper plates	70	72
Quicksilver	11	12
Lead	10	11 (but can be sold only for 9 due to glut)
Copper from Japan ¹⁷		60 (July 1674)
		68 (October 1674)

Source: Records of Fort St. George, 20 October 1674.

2.4. REACTIONS BY THE WORKERS

Although it is still difficult to say something more definitive about the development of real wages in this period, we may find some confirmation for our preliminary conclusion that life for labourers and possibly also for artisans like weavers had become more tough from the early 1670s until the end of the century. This can be deduced from the reactions of some of these groups themselves, focusing here on boatmen and washermen, about whom information is available in the records. In the years of rising food prices, they collectively attempted to attain better wages.

The boatmen of Madras performed a crucial function for the harbour and therefore for the urban economy because of the roughness of the surf at Fort St. George as well as the lack of depth, which prevented larger ships from coming close to the shore. With their small vessels, the boatmen used to transport the goods and passengers from the ships to the shore and vice versa (Ahuja, 2002, pp. 793–826). In 1678, it was reported that these boatmen, who had until then been paid 3 *fanams* per *messula*—a plank boat tied with coir—on which six bales could be laden, had asked for an increase in payment. They said that in Pulicat, the Dutch paid 5 *fanams*, and the *fanam* there was valued at 24 to the pagoda, as against the English price of 36 or 38 to the pagoda. They therefore asked that 5 *fanams* be paid at Madras also; the Company negotiated and got them to agree to a payment of 4 *fanams* but, shortly after the agreement, all the boatmen left the city. The initial meeting was held on 7 January 1678 and at that time, as said earlier, the boatmen agreed to both the payment of 4 *fanams* and to the condition imposed by the Company, which was that if any theft was reported, the head of the caste would have to make good the loss or else find the culprit who would then be transported to St. Helena. On 10 January 1678,

in the night they run all away carrying their Oars wth: them, whereupon the necessity of the present time enforcing, the Agent & Councell were fain to send after them to assure them fanms: 5 per boat and pardon for ye offenc[e] there being no other remedy.¹⁸

We see here an early example of collective action by leaving the settlement and effectively making sure that the Company goods could

not be transported to and from the ships. In another words, here is an indication of a form of organization of labour and of pressure tactics. The unifying factor was undoubtedly caste (Ahuja, 2002) but it functioned as well as a trade union, for the boatmen did not return until they had a written guarantee of increased payment.¹⁹

Comparable to this is the demand of the washermen 30 years later for an increase in the prices they were paid for washing the cloth that was supplied to the Company (Table 2.10).

Like the boatmen, the washermen too formed a distinctive caste, but at the same time they were able to act as a trade union if need be. The washermen complained (in writing) that the ‘six *conicoplyes*’—the six agents/accountants responsible for paying the washermen—had ‘curtailed’ the pay of ‘daily labour in curing the Company’s cloth’. They said that, though the Company had given an advance of 1,000 pagodas to the people in charge to give to the washermen, the washermen themselves had received only 600

Table 2.10 Increase in Rates Sought by the Washermen, Madras 2 April 1706

Type of Cloth	Existing Rates per Corge (or per Piece)	Increase Sought per Piece	Total per Corge (or per Piece)
Longcloth	36 <i>fanam</i>	2 <i>doodas</i>	41 <i>fanam</i>
Salampore	16 <i>fanam</i>	1 <i>dooda</i>	18 <i>fanam</i> 40 cash (20 <i>coveds</i> per <i>corge</i>)
Morees	10 <i>fanams</i>	1 <i>dooda</i>	12 <i>fanam</i> 40 cash (40 <i>coveds</i> per <i>corge</i>)
Ginghams	32 <i>fanams</i>	3 <i>doodas</i>	39 <i>fanam</i> 40 cash
Fine <i>morees</i>	12 <i>fanams</i> per piece	1 <i>dooda</i>	14 <i>fanam</i> 40 cash per piece
Neck cloth	5 <i>doodas</i> per piece	3 cash	1 <i>fanam</i> (16 <i>coveds</i> per <i>corge</i>)
Fine gingham	10 <i>fanams</i>	1 <i>dooda</i>	12 <i>fanam</i> 40 cash

Source: Records of Fort St. George, 2 April 1706.

Note: This is the only time that the word *dooda* appears in the records, and so the value is not possible to ascertain. In contemporary Tamil slang, the word means both money in general and small change in particular.

pagodas. In addition, of the ‘accustomary Portion of Rice we were to have for conjeeing [kanji, rice starch] the goods, we have received none this year’. They further complained that the *conicoplyes* had been partial in their distribution of the rice, so, where one of the chief washers got ‘24 mercall of paddy per pagoda’, the other 3 got only 21. Further, a deduction of $\frac{3}{4}$ of a pagoda was made for every hole found in the cured cloth. The washermen therefore demanded that all these grievances be redressed, failing which, they would leave town.²⁰ In this case, they achieved we do not know what they achieved but as no further complaint is recorded, we can assume that their demands were met. What is interesting is that this case was used in the Council as part of a case that was being built up against the then Governor, Thomas Pitt, who was increasingly being accused of many arbitrary decisions.

This kind of caste-wise collective action in order to improve income and work conditions in general is also known from other groups, such as brickmakers and money changers. In 1692, complaints were heard about the trouble in getting bricks for the repair of houses in Madras at reasonable prices, ‘having found by Experience that the Brickmakers do unite against an English undertaker and render the Cooley and Ox hire dearer to them’²¹ (Lucassen, 2006). There is also mention of collective action by *sar-rafs*—money changers—and, on one occasion, details about how much commission could be charged at the sea side and at the land entry into the town (Dodwell, 1921; Lucassen, 2006).

2.5. SUMMARY AND CONCLUSION

Madras between c. 1650 and 1720 was a thriving town in the hands of the East India Company and witnessed the steady increase of the revenue collected by the Company from sea and land customs, rents of houses and various licences (on sale of betel leaf, for instance) and on farming out of various duties and/or products. Unfortunately, other than for sea and land customs, we do not get consistent information from which averages can be worked out. The available information on the amounts collected for sea and land customs indicates the profits that were being accrued to the Company. This economic activity involved the work of many wage labourers and artisans, all dependent on the market for earning an

income and spending it at shops and in the marketplace for their daily necessities. As this chapter has shown, it is not easy to collect sufficient materials to get a reliable impression on the real incomes of all these toilers. However, we see clearly that they were faced with strong price fluctuations and that their wages reacted to these not only by way of abstract price mechanisms but also collective action.

How is one to place all this within the context of the Great Divergence debate? One thing that is clearly visible is prices, allowances, salaries and wages being paid to different categories of workers and soldiers. We get, in addition, information about the charges of hiring 'coolies'—presumably porters—and peons while going out of Madras, and the 'batty'—daily allowance—to be paid to them when they were on such tours. Nor was this limited to the travels of the English Company officials, for there are also references to an allowance being made to the merchants for the peons whom they sent out to check on and to bring the cloth back to Madras. While all this was undoubtedly within the context of the English trade, it should be remembered that this trade was with the products of the country and, therefore, with the hinterland. The prices fixed at Madras were not applicable to that city alone but were understood and accepted (or bargained over) by those who went into the hinterland. A money economy, the existence of coins of different kinds, an understanding of the value of the different coins and the value of these coins in circulation, depending on the knowledge of who had issued the coins (e.g., a frequent complaint of the English was that the Dutch pagoda of Pulicat was valued higher than their own from Madras, even though they were of the same weight and fineness) are all to be seen in the records. All this needs to be examined and understood, perhaps with a comparative study of English records themselves from different parts of India, as well as with Portuguese, Dutch and French records.

NOTES

1. A footnote to this states that this would work out to about £4.10s, £1.11s. 3d, £1.10s and £1.2s.9d, respectively.
2. Records of Fort St. George—Diary and Consultation Books (hereafter, RFSG—Diary), 21 July 1679.
3. Records of Fort St. George, 18 April 1681.
4. Records of Fort St. George, 2 Feb 1688 and 13 Feb 1688.

5. Records of Fort St. George, 18 Dec 1692.
6. Records of Fort St. George, 4 August 1688.
7. By 'right-hand girls' is meant the dancing girls belonging to the right-hand caste. The vertical division of castes in right and left hand is a distinctive feature of the Tamil region from about the 8th century till about the 18th century. See Appadurai (1974, pp. 216–259) and Subbarayalu (1999, pp. 1118–1125).
8. Records of Fort St. George, diaries for the period 1672–1675; also *Records of Fort St. George: Letters from Subordinate Factories*. While these are available for the period after 1690, we find references to the famine of 1673–1674 in some of the letters of 1690 and 1692.
9. I have not been able to trace any of the other references. The equivalences of *maund* and *ser* are also based on family documents, specifically, my grandfather's diary, in which he had noted the metric equivalents of the *maund* and the *ser*, when India shifted to the metric system!
10. Records of Fort St. George, 31 January 1676.
11. Records of Fort St. George, 21 February 1679 and 27 February 1679.
12. Records of Fort St. George, 18 March 1693.
13. Records of Fort St. George, 25 January 1676.
14. Records of Fort St. George, 11 January 1720.
15. Records of Fort St. George, 15 September 1679.
16. Records of Fort St. George, many references, for example, 30 June 1675, 26 February 1681 and many more.
17. For prices of Japanese copper in India, including Coromandel, mainly used for the production of copper coins, see Shimada (2006).
18. Records of Fort St. George, 10 January 1678.
19. Records of Fort St. George.
20. Records of Fort St. George, 2 April 1706.
21. Records of Fort St. George, 29 December 1692.

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WAGES, PRICES AND MONEY IN 18TH-CENTURY MAHARASHTRA

Rekha Ranade

In 2000, Kenneth Pomeranz pointed out that ‘Much of modern social science originated in efforts by late nineteenth-and twentieth-century Europeans to understand what made the economic development path of western Europe unique’ (Pomeranz, 2000, p. 3). He went on to say that the book was meant to explore the ‘difference’ between European development and that seen in other parts of the world.

While the debate on this ‘Great Divergence’ has resulted in considerable research by P. Parthasarathi, Stephen Broadberry and Bishnupriya Gupta, what still remains largely untapped is the wealth of material available in Indian vernacular archival documents, particularly those of the 18th-century Maratha power. Many of the documents of this time remain unpublished and, therefore, unstudied, but they contain a great deal of economic data on prices, wages and sources of income from the perspective of the state, no doubt, but of tremendous value nonetheless. However, for this chapter, I have used some of the very few published primary sources.

Against this background, I would like to present some data which would throw light on the actual facts and history of Maharashtra in the 18th century. The Maratha kingdom founded by Chhatrapati Shivaji Maharaj in 1674 CE was later expanded into the Maratha empire by the Peshwas. The Peshwa period runs from 1713 to 1818 when the British conquered it from them.

Ample original data are available on this topic of wages, prices and money in 18th-century Maharashtra, especially of the Peshwa period, both in governmental administration and in family papers like Khasgiwale Daftar. Some of the original documents have been published a hundred years ago which, however, were mostly political in nature. Very few documents pertaining to economic issues have still not been used for throwing light on the economic aspects of the history of that period.

Documents mentioning salaries and wages of various civil officers, clerks, soldiers, military commanders, skilled and unskilled labourers, and other servants are available. Lists of prices of food grains, vegetables, various types of cloth and other trade items such as metals and animals are also available. At the same time, abundant material is also available on the money economy and the banking system.

These data are available for different places and regions that were under the Maratha rule, for example, for Pune and Patas Pargana in Maharashtra or Surat Pargana in Gujarat or Bhopal Pargana in the north. I have made an attempt to study various examples dealing with this topic and co-relate them to derive a clear picture of the economy of the period. Original sources, both published and unpublished, are available. I am mainly dealing with the first half of the 18th century (up to the 1760s) as this period is the most active period for the Maratha rule. The expansion of the Maratha power in North India and South India during this period changed their lifestyle and perspective. Prosperity and internal stability were the striking features of the period. This period was characterized by the growing economy, economic activities and also the adverse effects of the third battle of Panipat (fought between the Marathas and Ahmad Shah Abdali in 1761) on the economic life, in general, of the Maratha country. This led to changes in economy.

3.1. MONEY IN CIRCULATION

For paying wages in cash, money, which is currency in the form of coins, should be available. In the Peshwa period, coins in the denomination of rupees, annas and paisa were easily available and abundant. Although the currency was fixed, coins were minted by the government mints and also by various authorized mints. The government had fixed the percentage of silver in a rupee. Coins having that standard were given preference. Mints producing impure coins were punished by withdrawing their license. Coinage was available in abundance. The coinage was dealt with by bankers.

The policy of expansion of the Peshwas in North India and South India created more economic space for various economic activities. Trade, banking, etc., expanded in the 18th century. Since the opportunities already existed, enterprising people had to come forward to make use of the new space. Some people realized this and came forward to venture in this business. There was a huge risk involved in this but, at the same time, it also offered new possibilities for growth. This environment led to the creation of a bankers' class that is of Savakars. Bankers—both large and small—were flourishing because of the demand from the government, military commanders and common people. Large bankers could easily extend loans amounting to lakhs of rupees in cash on the spot (Athavale, 1999–2000, p. 48).

The banking system was scientific in those days. The indigenous banking system was a part of the 'bazaar economy' as Rajat Ray explains it (Ray, 1992, p. 11). He also argues that it was not 'unorganized' (as against the organized sector of the Western economy) but organized in its own way. It served the needs of the people. Indigenous banking had its own methods, structures and functions for banking. It was carried out by individuals as well as private firms. They were separate from each other, though there was some understanding between them.

The banker extended loans to the state and army commanders, businessmen, agriculturist and ordinary citizens. Loans were advanced to the state for military and administrative purposes, campaigns, paying salaries of troops and other officers, etc. The maximum amount of such loans used to be in lakhs. However, the

loans extended were not always huge, for even small sums were given as loan even to the Peshwa's family. Loans were extended to traders and businessmen depending upon their needs. Generally, such loans used to be short-term loans given on personal security. Loans were advanced to other sections of the society as well, for example, washermen, goldsmiths, coppermiths, etc. The Vaidya Daftar (family papers of renowned bankers of that time) mentions such loans (Vaidya, 1944, pp. 34–35).

What I am pointing to here is the existence of a well-organized fiscal system. One part of this system was banking and the transfer of money through the use of *varats* and *hundis*—bills of exchange. There was clearly a flourishing money economy, with a clear understanding of the place of coins, large and small. Salaries, as said above, could be both in cash and in kind, but it needs to be emphasized that these were salaries, not perquisites alone. The kind of information that exists in these records, if examined in greater detail, would provide us with a great deal of more information on wages, money and the circulation of money in Maratha country in the 18th century.

3.2. WAGES

Wages were paid in return for services rendered. These services could be civil or military in nature, or they could be other types of work requiring skill, etc. There were two modes of payment. Wages or salaries were paid either in cash and/or in kind.

When the salary was paid in cash, it used to be fixed by the government and was paid in the then currency, that is, rupees.

When the wages were paid in kind, they were paid either in the form of cloth or food grains. It seems that generally expensive cloth was given to officers holding high positions in addition to their salary, probably because they were representing the Peshwa's government in different regions of India and also to maintain their status in the society. The high-ranking officers were also given allowances to maintain a palanquin which was a status symbol. We also find in one instance that simple pieces of cloth were given to labourers to cover their heads while working so that they would be protected from dust.

Grains such as rice, jowar and bajra were given to labourers on an everyday basis or sometimes monthly basis. This was clearly

mentioned at the time of their appointment itself. Wages given were also mentioned very clearly whether to be given per day or per month.

3.2.1. Salary on Yearly or Monthly Basis

In 1743–1744 CE, the remuneration of the *Kamavisdar* (tax collector) of Bhopal was fixed at 4 per cent of the revenue received. He was also to maintain a garrison for protection purposes (Vad, 1907, I:3, pp. 255–256). Their salaries were fixed by the Peshwa government as shown in Table 3.1.

In addition to this, the *Kamavisdar* was given ₹750 as a gift (baksheeshi).

Out of this amount, ₹500 was for maintaining a palanquin and ₹250 was for a gold bracelet (*kade*).

Table 3.1 Salaries for Garrison

<i>Kamavisdar's</i> salary	₹7,000 per year (4% of the revenue of ₹175,000)	₹583 per month
His garrison's salary		Therefore actual salary per month
1. <i>Swar</i> (a soldier having a horse)	₹150 per <i>swar</i> per year (<i>this is assumed, but not mentioned in the sources</i>)	₹12.5
2. <i>Pyade</i> (foot soldiers)	₹3 per month for 8 months (<i>aathmaahi</i>)	₹2
3. <i>Jasud</i> (messenger)	₹4 idem	₹2.66
4. <i>Chopdar</i> (the one who carries the mace)	₹2 idem	₹1.33
5. <i>Divatya</i> (a torchbearer)	₹4 idem	₹2.66
6. <i>Aftagira</i> (the one who carries an <i>aftagir</i> , i.e., an ornamental umbrella)	₹5 idem	₹3.33

We find many examples of officers and other high-ranking commanders who were given salary in cash and in kind in the form of cloth. Nilo Mahadev was appointed as *Sabnis* (a civil officer) at Sinhagad Fort in 1750–1751 CE. He was to be given a salary of ₹600 in cash per year and valuable cloth worth ₹100 (Vad, 1907, p. 192). Here, what is significant is the cost of the cloth that was given, indicating, probably, the seniority in the bureaucracy as well as his value to the state. In 1762–1763 CE, the salary of Rudraji Vishwanath who was appointed administrator of the Jawhar Sansthan was fixed at ₹1,800 in cash which included ₹800 for maintaining a palanquin and also ₹400 worth of clothes. His *Rauts* were also given clothes worth ₹25 each (Vad, 1911, I:9, p. 246). In 1765–1766 CE, an officer was sent to manage the affairs of the navy under Anandrao Dhulap (Admiral of the Maratha Navy). His salary was fixed at ₹1,100 out of which ₹1,000 were to be paid in cash and ₹100 to be paid for cloth (Vad, 1911, pp. 340–341). Many such entries are available for study.

In the case of other servants, soldiers, labourers or workers, the salary was given in cash and/or in kind as well. There are many instances wherein salaries were also paid in cash and in the form of food grains. In the Maratha navy, salaries were fixed for various office-bearers, soldiers, sailors and other servants. When 1,000 men of the naval force of Raghuji Angre, a *sarkhel*, were sent for assistance to Vijaydurg—a sea fort in 1788–1789, their salaries were specified (Vad, 1908, I:4, pp. 168–169).

In Table 3.2, we can see how they were paid per person per month.

In some cases, mention is made that the salary should be given for 8 months (*aathmahi*) or for 10 months (*dahamahi*) or for 11 months (*akramahi*). But the work was to be done or service was to be rendered for 12 months.

For example, in 1763–1764 CE, appointments were made on Fort Bahula in which ₹5,775 were to be paid to 75 musketeers for 11 months. However, the service was to be provided for 12 months. Hence, effectively, the salary of 1 musketeer was ₹6.4 per month. In another example, a monthly salary of ₹3 was fixed for a torchbearer. He was to work for 12 months but a salary of only 10 months was to be paid to him. So, in reality, he was to get ₹2.5

Table 3.2 Salaries for Naval Employees

Naval Employees	Salary in ₹ per Month	Rice (by Measure) (In Addition to the Salary in Cash per Month) Maunds Converted into Kg
Sardar	2	93.3
Sarang (officer on the boat)	2	93.3
Tandel (chief officer of the boat)	2	93.3
Soldier	1.50	55.98
Daryavardi (sailor)	1.50	55.98
Porga (a boy helper)	0.75	27.99
Nishandar (a standard-bearer)	0.75	27.99

per month effectively. A salary of ₹650 was fixed for three clerks of which one was to be paid ₹250 per year and the other two were to be paid ₹200 per year.

If the salary of a person was to be given for all 12 months, then it was clearly mentioned accordingly. For example, the clerk getting a salary of ₹250 was probably a more senior and experienced clerk or the chief clerk because he earned no less than ₹22½ per month. A salary of ₹125 was to be paid to a *havaladar* per year which included all 12 months (Vad, 1911, 1:9, pp. 346–347).

An extremely high salary is recorded in 1762–1763 CE of ₹250 per year for a soldier which was to be given for 12 months (*barmahi*) (Vad, 1911, p. 311). This again demonstrates the effect of the third battle of Panipat (1761) on the Maratha army. More than 50,000 Maratha soldiers were killed in the battle. Also, in 1762–1763, the Maratha–Nizam war seemed to be imminent (which ultimately resulted in the Battle of Rakshasbhuvan on 10 August 1763). Therefore, the demand for soldiers must have resulted in an increase in the soldier's salary proportionately.

Similarly, wages were paid to skilled artisans in the construction industry. Carpenters seemed to be getting more wages as he was paid ₹10 per month in 1745 (Sardesai, 1932, Vol. 23, p. 11).

However, in 1811 CE, construction work at the temple of Rameshwar in Pune was undertaken. For this work, the wages of four carpenters were fixed at ₹15, ₹14, ₹12 and ₹10 each per month. They worked for 70 days. Similarly, stone workers and masons were paid ₹12 per month (Chapekar, 1937, p. 250). It is interesting to note that the wages given in this case were paid on a monthly basis and not on a daily basis. This probably could be a piece work rate as they worked only for 70 days.

3.2.2. Wages on a Daily Basis

Most wages were paid or at least calculated on a monthly basis as the many examples cited demonstrate. Occasionally, wages were also paid on a daily basis. When, in 1755–1756 CE, the Katraj tank in Pune was being constructed, wages were paid in cash and in kind. An amount of ₹65,049 and 14 annas was the total expense on the wages of these labourers who were to work for an entire year. However, it is not clear how many labourers were employed for this work in the given year. In addition to the wages, the labourers were also provided with grains in kind which totalled to 1,509.13 kg (i.e., $7\frac{1}{2}$ *khandi*, $\frac{1}{4}$ *maund*, $1\frac{3}{4}$ *ser*). Such a large quantity clearly indicates that the number of labourers must have been quite large (though the number is never specified) and also that they were given these grains to last them an entire year while they worked on the construction of the tank. In addition to this, all these labourers who worked in this particular year for the construction of the tank were also provided with turbans worth ₹653 and 7 annas. There is an entry of the payment to be made to two stone workers. It was a piece work and therefore they worked for only two days. The entry stated: 'Payment of ₹2/- to 3/- should be given to 2 stone workers for working for 2 days.' This would mean ₹15–22 per month, so very high wages indeed, and available only for the top skilled workers (Vad, 1906, II:2, p. 218).

Wages of three tailors working for two days was ₹1 and 2 annas in 1749–1750, or 3 annas per person per day, which makes more than ₹5½ per month (Vad, 1906, p. 185). Similar wages were paid out for skilled construction workers. In 1782–1783, on the occasion of the marriage of Peshwa Sawai Madhavrao, one mason and 25 labourers were appointed to repair the roads of the city

of Pune. Their wages were fixed per month as follows: ₹7.50 for one mason, ₹7.50 for one *sumbekari* and ₹4 for one labourer (Vad, 1908, I:4, p. 111).

From the above data, it seems that people appointed in positions of responsibility such as *Kamavisdar*, officers and clerks used to receive more salary and were additionally also paid in the form of cloth. They also received salary for all 12 months. Soldiers were also paid salary for all 12 months. But, in some cases, soldiers, personal staff of these officers were paid salaries for some months only. However, the skilled labourers were paid comparatively lower wages than on a daily basis or a monthly basis. The unskilled labourers were paid further lesser wages in cash but additionally they were given food grains which must have helped them in maintaining their families in spite of the low wages.

3.2.3. Weights and Measures

Since we have looked at examples of salaries and wages being additionally paid in food grains, one must note that the standards for weights and measures were also fixed by the Peshwa's government. Although these used to vary locally also. Yet the government used to verify and stamp them on behalf of the government from time to time and place to place. The government used to take action against those who did not follow the standards fixed and approved by them (Vad, 1911, III:8, pp. 228–235). Therefore, a detailed and an in-depth study of these weights and measures could perhaps clearly bring out the slight variations in these regionally and the reasons for the government's approval of the same.

3.3. PRICES

However, it must be noted that wages cannot ever be studied in isolation. They have to be studied in the context of the prices of food grains and other essential commodities of that period. The reason for it being that every time period in history has its own economic price index which gives us an idea of the lifestyle that the people lived by drawing the relation between their income and expenditure. We find many such price lists for different periods. The Peshwa government used to take a survey of the prices (called *nirakh*) in markets of different places. One cannot say for

certain why these were done; however, there is a possibility that these surveys were done probably with the intention of controlling market prices. This could have been a welfare measure for their subjects to promote affordability for them. Here is a price list for the years 1719–1721 CE of Sagunshi, a place on the south banks of the Krishna River, which was under the Maratha rule, as a specimen (Vad, 1906, II:2, pp. 180–85).

The case of changing prices of ghee (clarified butter) is quite interesting to study. I have taken the prices of only three different years, but it is very significant as they represent three different phases of the Maratha history.

Ghee seems to be the most expensive product in 1719–1721 CE costing ₹1 for only 0.670 kg ($\frac{3}{4}$ *ser*). During Peshwa Balaji Bajirao's period, however, ghee seems to have become cheaper as it cost only ₹1 for 1.87 kg (2 *ser*) of ghee in 1755–1756 CE. This could be an indication of the prosperity of that period (Vad, 1906, p. 184). In 1764–1765, however, the price of ghee increased again. The

Table 3.3 Prices of Various Food Items

Commodity	Price in ₹ (Approximately) per Kg	Quantity in Kg per ₹
Milk	0.05	18.66
Wheat flour	0.03	37.32
Jowar	0.02	52.48
Bajra	0.03	37.32
Gram	0.03	35.82
Rice	0.06	17.42
Jaggery	0.23	4.35
Oil	0.27	3.73
Salt	0.07	14.93
Turmeric	0.27	3.73
Onions	0.09	11.20
Sugar	0.27	3.73
Ghee	1.43	0.670

rate was ₹1 for only 1.50 kg (1.61 *ser*) ghee. This might be greatly because of the effects on the economy of the Maratha country after the third battle of Panipat (Vad, 1911, II:7, p. 314).

How can these prices help us to know the purchasing power of the wages summed up in the first section? One must keep in mind that the prices mentioned above belong to one region and the prices in other regions might slightly vary from these. Nevertheless, even after accepting such local variations, one can conclude that the basic essential commodities were cheap, in the sense, that a person receiving wages of ₹3–5 per month could live a decent life with a family of about five to six persons (including children), whereas a person earning ₹5–10 per month could live a good life with his family of five to six persons. In case of some labourers whose salary was only ₹1–2 per month, we can see from the records found that additionally they were given sufficient quantity of food grains per month to maintain their family. Survival, on what seems as meagre wages, was therefore not a problem in those days. Officers and others who earned more salary could, in fact, live lavishly.

3.4. SUMMARY AND CONCLUSION

Thus, in 18th-century Maratha country, there was a proper correlation between money, wages and prices. Sometimes, due to certain historical events like battles or droughts or other such reasons, we do find some changes in prices or wages, but they would soon become normal. Money in cash was handled by the efficient banking system which became a pillar of the Maratha economy. Wages depended on the quality and quantity of the work that one had to do. Although, apparently, the wages seem less to us, they were actually not so less when we compare them with the prices of various essential commodities of the period (if we compare the gold prices of that period, we can understand this better). Gold price in 18th-century Maratha country ranged from ₹15–₹18 per tola that is 11.66 g). Subsistence was not a problem in a normal situation in that period. One more factor was that the basic needs of the people in those days were less. Hence, in the given wages also they could live, what can be called, a normal life. With this study of the wages–prices structure, we can have a better picture of the Maratha economy.

GLOSSARY

1. *Aathmahi*: Salary of 8 months
2. *Aftagira*: A person carrying the *aftagir*, that is, an ornamental umbrella
3. *Akramahi*: Salary of 11 months
4. *Barmahi*: Salary of 12 months
5. *Chopdar*: A mace bearer
6. *Dahamahi*: Salary of 10 months
7. *Daryavardi*: A sailor
8. *Divatya*: Torchbearer
9. *Ghee*: Clarified butter
10. *Havaladar*: Soldier
11. *Jasud*: A messenger
12. *Kade*: Bracelet
13. *Kamavisdar*: The head collector of revenue of the specified territory
14. *Nishandar*: A standard-bearer
15. *Porga*: A page or a helper boy
16. *Pyada*: A foot soldier
17. *Raut*: A trooper
18. *Sabnis*: Head clerk in charge of payment of salaries to officers and servants
19. *Sarang*: A worker on a boat
20. *Sarkhel*: Chief commander of the navy under Angre
21. *Sumbekari*: A worker with the *sumba*, a stone splitter
22. *Swar*: A horseman
23. *Tandel*: Chief officer of a boat

Currency during the Peshwa Period

4 paisa = 1 anna

16 annas = 1 rupee

Weights and Measures during the Peshwa Period

4 ser = 1 *payali*

40 ser = 1 *mun* or *maund*

20 *maunds* = 1 *khandi*

(In modern terminology: 1 ser = 0.933 kg)

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CHAPTER 4

WAGES IN THE 18TH-CENTURY MARATHA REGION

Surendra Arjun Shirsat

4.1. INTRODUCTION AND METHODOLOGICAL REMARKS

In pre-modern Indian society, work by wage labourers, whether called workers, labourers or servants, was basic for not only all economic sectors, particularly agriculture—by far the largest of all—but also industry, transport, trade and commerce, and any work performed and organized directly by the government. Despite the view in most historiography, 18th-century Maharashtra was in many ways a period of economic prosperity (Gordon, 1994, 2007; Perlin, 1984, pp. 96–107). If this revisionist view is correct, we may ask ourselves to what extent wage dependents occupied both by the government and private employers shared in that prosperity. In this chapter, I will attempt to answer this question on the basis of fresh material in the Marathi language available in the Pune archives (for an overview, see Divekar et al., 1989, p. 1, 3–6). The majority of my sources refer to income and expenditure of the government, but still a glimpse of privately paid wages will be visible. Records on wages and prices are also available for pre-18th century Maharashtra, but less sufficiently and therefore this exploratory chapter concentrates on the 18th century.

By 'Maratha region' is meant here the area that Chhatrapati Shivaji had established as an independent state in the 17th century as well as its extensions in the 18th century, situated in today's Maharashtra by his successors (Gordon, 1994; Sardesai, [1946]1986). In that age and up until its conquest by the East India Company, this was part of a still greater unit, the Maratha Empire (see Figure 4.1).

The Maratha region was administratively divided into *prants*, comparable to the *parganas* of the Mughal empire. As all *prants* shared a common political, economic and administrative system, one of them, for which good sources are available, has been selected for this case study, the area of Pune *prant* (see Figure 4.1). Even if details will undoubtedly vary, it is probable that the results will be found to be applicable to the entire Maratha region. However, at present, no comparative historical studies have been attempted at.

This chapter is based on documents from the Pune Archives, also known as the *Peshwa Daftar*. One section in particular, known as the *Prant Ajmas Daftar*, is useful for the study of the Maratha economy and related subjects. It includes the data pertaining to the Pune *prant*, which is used in this chapter. The documents are written in Marathi, noted down in the *Modi* script, a script that was used until almost the middle of the 19th century but is no longer in use. The language is Marathi.

In these financial documents, the formation on wage payments can be found among the expenses under the title *baddal mushahira* (बदल मुशाहिरा), which may be translated as salary. We also find other related words such as *rojmarā* (रोजमरा), especially used for wages to unskilled labourers), and *vetan* which seems to have about the same significance, as well as *tainat* (military salary) and *aasami* (literally 'person[s]' but in this context persons to whom salaries have been paid; Chapekar, 1937, p. 16).

One way to determine the importance of the wage sector is to study the share of wage payments in total expenditure. All sources studied here demonstrate clearly that a major part of state expenditure was on wages. For example, direct expenditure on wages in the entire Maratha empire between 1763 and 1772 varied from 84 per cent to 91 per cent (Table 4.1).

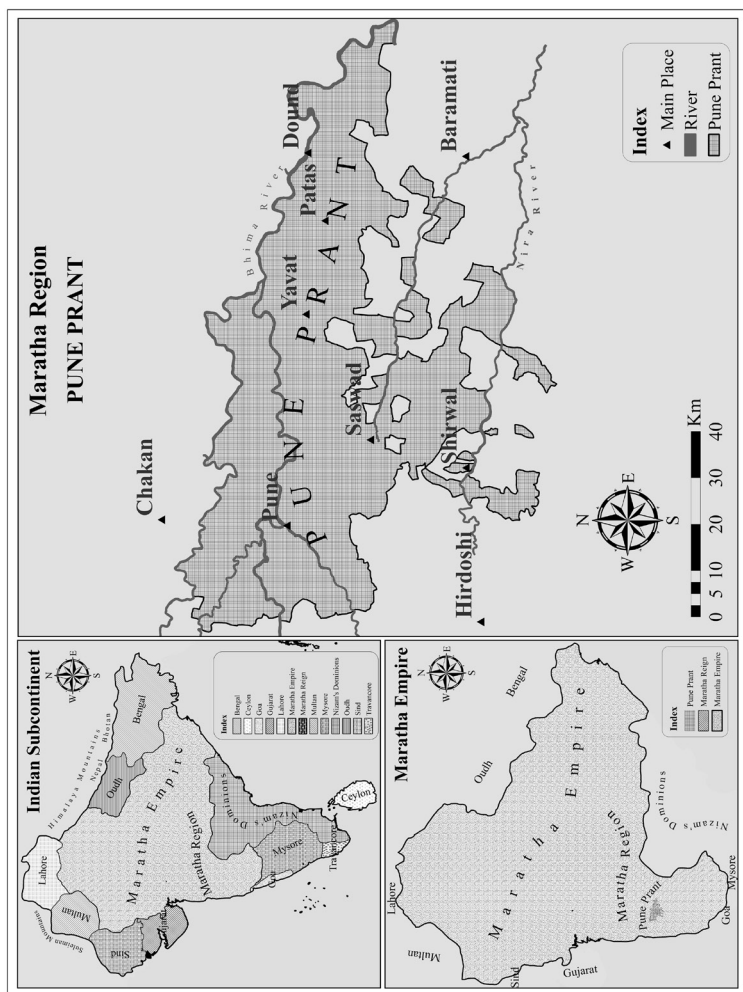


Figure 4.1 The Maratha Region in the 18th Century

Source: The author.

Table 4.1 Salary–Expenditure Proportion: Maratha Empire 1763 to 1772

Year	Expenditure: Salaries	Percentage	Expenditure: Other than Salary	Percentage
	Amounts in Crores		Amount in Lakhs	
1763	1.45	88	20	12
1764	1.70	84	30	16
1766	2.25	91	25	9
1767	2.00	87	25	13
1768	2.00	86	30	14
1769	1.80	86	27	14
1770	1.70	84	30	16
1772	2.75	91	40	9

Source: Chapekar (1937).

Table 4.2 Salary Expenditure Proportion in the Forts Near Pune Town

Year	Fort	Actual Expenditure	Expenditure on Salary	Percentage
1764–1765	<i>Sinhagad</i>	46,000	40,500	88.05
1770–1771	<i>Sinhagad</i>	53,041	46,351	87.38
1787–1788	<i>Sinhagad</i>	64,319	48,994	76.17
1766–1767	<i>Purandar</i>	29,650	26,416	89.09
1815–1816	<i>Purandar</i>	29,820	27,912	93.60

Source: Unpublished *Modi* script document, Pune Archives, *Prant* Ajamas Section, *Rumal* no. 08, 100, 130, 146.

At the lower levels, we see something similar, for example, in the period 1764–1765 to 1815–1816, between 76 per cent and 94 per cent of the total expenditure for the forts near Pune were paid as salaries (see Table 4.2).

A lower, but still impressive ratio (47%–63%) is found for the expenditure of the Pune *prant* (see Table 4.3) (Apaté, n.d., p. 123). It is to be remembered that fort expenditure was only on salary, while

Table 4.3 Salary Expenditure Proportion in Pune *Prant*, from 1738–1739 to 1785–1786

S. No.	Region	Year	Total Expenditure in ₹	Salary Expenditure in ₹ Paid Directly for Baddal Mushahira and for the Forts	
1.	Pune <i>prant</i> ¹	1738–1739	78,808	37,324	47.36%
2.	Pune <i>prant</i> ²	1742–1743	90,331	55,123	61.02%
3.	Pune <i>prant</i> ³	1767–1768	132,789	66,173	49.53%
4.	Pune <i>prant</i> ⁴	1772–1773	128,532	59,983	46.66%
5.	Pune <i>prant</i> ⁵	1785–1786	136,120	85,092	62.51%

Source: *Prant Ajmas*, *Rumal* no. 1, 26, 27, 39, 427, 428, 429, 551.

Note: Besides, we know that in 1776–1777, the salary of hereditary officers was ₹68,655 and ₹62,484 in 1802–1803.

prant expenditure is on everything including salary. However, as can be seen from the table, salary expenditure still remained high.

In view of the fact that wages were so important, at least in the government sector in this part of India and for this period, it is to be regretted that wages have never been studied before, so we have to start from scratch and will therefore take the following steps: in Section 4.2, we will report and discuss the different types of nominal wages found in the sources; in Section 4.3, we follow the modes of payment which will enable to receive an idea of wages actually received during one year by different groups of occupations; in Section 4.4, we will take the step from nominal to real wages and to standard of living by introducing prices of primary products in Maharashtra in order to summarize the main results and draw some conclusions.

4.2. SALARIES AND WAGES

We can divide the wage earners, found in these sources into three categories: (a) civil servants, (b) military, (c) privately paid servants and workers. They will be presented and briefly discussed in this order.

4.2.1. Civil Servants of the Central Government

Civil servants of the central government were paid salaries from high to low. Just to give two examples: Shrinivas Gangadhar, the *pratinidhi* or prime minister of the Maratha empire received ₹66,661 each year in the period 1763–1771, and Harirao Ramchandra, the *amatya* or minister of finance, received ₹2,436 rupees in the same period (Apate, n.d., p. 108). The revenue collectors of the *prants* were also well paid, for example, the *Kamavisdar* of Pune *prant* received ₹3,000 from 1737–1738 to 1742–1743, ₹4,000 in 1763–1764 and even ₹8,000 between 1783–1784 and 1804–1805.⁶ The *subedar* or the head of a *suba* (the larger province which was subdivided into *prants*) received ₹1,500 in 1783–1784.⁷ The subedar got a lower salary because he was a permanent official who got paid irrespective of how much revenue was collected. The *Kamavisdar* on the other hand was appointed for a specific period under a contract and was paid according to the revenue collected. Generally, 4 per cent of the income paid to the state was the *Kamavisdar*'s share. However, this also varied, so it could be either a fixed salary or a share of the revenue.

These sums are impressive, of course, but most likely they represent only part of the total remuneration and perks that such high-ranking civil servants received. On the other hand, they also had to maintain an extensive household. Although it is not difficult to cite more of such high salaries, I will concentrate hereafter on medium and low incomes as they tell us much more about the general welfare of the population (Tables 4.4 and 4.5).

As may be expected, salaries depended on the level of administration, as exemplified for the Civil and Revenue Department of Pune *prant* and its subdivisions or *tehsils*, called *Patas Taraf*.

The lowest administrative level of the Maratha empire was the sub-district, headed by a *deshmukh* (its hereditary chief), assisted by a *deshpande* and encompassing a number of towns and villages. The village offices included the *patil* (the hereditary village headman), the *kulkarni* (his clerk who received half the salary of the *patil*) and the *chougula* (his assistant). In the *kasba* or market towns, we find offices such as *shete* (the superintendent of the market, also responsible for just weights and measures)

Table 4.4 Salaries of Civil Servants and Military of the Central Government

Post in the Civil Administration	Per Year (₹)	Per Month (₹)
<i>Fadnis</i> (head clerk)	350	30
<i>Potanis</i> (head of treasury)	312	29
<i>Sabnis</i> (head of salary office)	300	25
<i>Gumasta</i> (agent)	200	17
<i>Karkun</i> (clerk)	75–100	6–8
<i>Pyada</i> (peon)	50	4
<i>Tofevaril kasar</i> (skilled artillery worker)	Not given	30
<i>Swar</i> (freelance horsemen)	Not given	15
<i>Bargir</i> (horsemen)	Not given	6
<i>Saravan</i> (camel rider/men)	Not given	3–4
<i>Harkami</i> (all sorts of jobs)	Not given	4
<i>Pakhali</i> (watermen)	Not given	3
<i>Mottadar</i> (housekeeper)	Not given	2–3

Note: Salaries in italics are our own reconstruction of monthly wages (rounded) where only annual wages are available.

and the *Mahajan* (superintendent of the traders). The wages of these hereditary authorities were mainly paid out in the form of usufruct of land but, in addition, there was also a certain sum of cash, called *Sadilwarpatti*, sometimes added by a portion from octroi and some articles given by villagers (Elphinstone, 1821, Appendix xxi).

For one local government, that of the capital of Pune, we know the salaries and wages of 56 civil servants, all paid out in cash (Table 4.6).

We may conclude that the income of the higher echelons consisted of different components. A common worker, however, like a peon or a water carrier in 18th-century Maharashtra, received only a wage in cash and could expect to receive on average a wage of ₹2 to ₹3 and at a maximum of ₹4 per month.

Table 4.5 Annual Salaries for Officials of Pune Prant

	Havaldar हवालदार	Taraf Kamavisdar तरफ कामाविसदार	Mujumdar मुजुमदार	Daftardar दफ्तरदार	Lihinaar लिहिणार	PyadeLok प्यादे लोक
	Head of Administration	Revenue Collector	Office Superintendent	Documentation Officer	Writer	Peon
Tehsil Level						
1737-1738 ⁸	120	—	72	48		24/30/35
1742-1743 ⁹	120	—	72	48		24/30/35
1763-1764	130	375		—	115	36
1783-1784	130	375	50	—	125	36
1794-1795	130	225	50	—	125	36
1804-1805	130	—	—	—	125	36

Source: Prant Ajamas Section, Rupal no. 1, 26, 27, 39, 427, 428, 429, 551.

Table 4.6 Salaries Paid by the Central Kotawali Office of Kasba Pune, 1767–1768

Post	Number	Wages per Person per Year (₹)	Total
Kotwal (commissioner of the city)	1	300	300
Vakil (advocate)	4	50	200
Daftardar (document keeper)	1	150	150
Gasti che lok (security guards)	4	125	500
Shibandi (sipahi, soldier) (for 11 months)	40	44	1760
Divatya (torchbearers) (for 11 months)	2	55	110
Harkami (unskilled helper)	2	50	100
Watandar Naikavadi (hereditary worker at the octroi post)	2	24	48
Watandar Dandiye (hereditary post at the octroi post)	2	24	48
Watandar Tansari (hereditary worker at the octroi post)	2	24	48
Total	56		3,264

Source: Prant Ajamas Section, Rumal no. 120.

4.2.2. Military

Above we have encountered already a number of military salaries (see Table 4.4). For a number of reasons, it is not easy to understand these military salaries precisely. First, military received an extra allowance for outstation military expeditions (Chapekar, 1937, p. 16). Second, senior officers had to spend part of their salaries to the payment of servants and goods (see Table 4.7, partially overlapping with Table 4.8).

Third, annual salaries were sometimes understood as pay during 11 or even 8 instead of 12 months. Fourth, salaries were sometimes paid out both in cash and in goods, especially textiles. Besides, sometimes the cash part of the salary of officers was

Table 4.7 Annual Salary of Naganath Narayan, *Killedar* (Commander) *Sinhagad* fort 1764–1765

₹	
1,000	For himself
110	2 assistants (<i>Porga</i>) ¹⁰ salary for 11 months (per person per month ₹5)
55	Torchbearers' salary for 11 months (per month ₹5)
66	Banner holder salary for 11 months (per month ₹5)
48	Brahman salary for 12 months (per month ₹4)
75	Cook salary for 12 months
135	Feed for horses
55	Guard salary for 12 months
100	Given cloths as a share of salary, 250 <i>aankh</i> (a measurement of cloth)
333.5	Food and religious expenses
22.5	Oil for lamp
2,000	₹ total

Source: *Prant Ajamas* Section, Rumal no. 8.

paid through *varat* (वरत) or promissory note dispatched by the government (Chapekar, 1937, p. 17). Payment was mentioned in cash but actually it was delivered as follows: one-third in cash, one-third in cloth and one-third in kind. For example, in the year 1750–1751, *Nilo Sondeo* was appointed as a *Sabnis* or head clerk at the *Sinhagad* fort. His salary was ₹600 per year in cash, cloth 100 *aankh*. His salary also included payment of *divatya* (torchbearers) and *pyada*, helpers, who were to be paid ₹4 per month, but the salary would be paid for eight months for a 12-month work period (Vad, 1906: I:2, p. 192).

Taking this all into account, we nevertheless receive a clear picture, especially for the lower ranks.

Ordinary wages were paid out in cash, kind or both, as per terms and conditions laid by government and previous traditions.

Table 4.8 Salaries for Sinhagad Fort 1764–1765

Post	Persons Appointed	Salary Type	Salary per Month	Salary (₹ per Year)
<i>Killedar</i> (contractor of revenues of the fort)	1(– 7)	Yearly	167	2,000
<i>Hawaldar</i> (head of fort administration)	1	Yearly	50	600
<i>Sarnobat</i> (treasurer at the fort)	1	Yearly	16.5	200
<i>Subedar</i> (head of the fort and the surrounding region)	1	Yearly	37.5	450
<i>Sabnis</i> (in charge of salary)	1	Yearly	33	400
<i>Karakhanis</i> (maintainer of the stock)	1	Yearly	16.5	200
<i>Fadnis</i> (documents in charge)	1	Yearly	16.5	200
<i>Karkun</i> (clerk)	1	Yearly	10.5	125
<i>Lihinar</i> (writer)	3	Yearly	16.5	200
<i>Sardar</i> (chieftains at fort)	15	Yearly	25	–
<i>Bargir</i> (soldiers)	535	Yearly	10	120
<i>Porga</i> (assistant or peon)	2	11 months	5	110
<i>Divatya</i> (torchbearers)	1	11 months	5	55
<i>Abdagira</i> (umbrella holder)	1	11 months	6	66
Brahman	1	Yearly	4	48
<i>Mudpak/Achari</i> (cook)	1	Yearly	6	75
<i>Bhaledar/Choppdar</i> (Guard)	1	Yearly	4.5	55
<i>Pyada</i> (Unskilled labourers)	80	Yearly	2	25
	648			

Source: *Prant Ajamas* Section, Rimal no. 8.

Note: In italics, our own reconstruction of monthly wages (rounded) where only annual wages are available.

The cash part was paid by the government through its salary office. Sometime, the soldiers were given a letter known as *Shetasanad* (शेतसनद) to collect their wages from the revenue income of certain villages. Sometimes the entire salary of a person was paid in kind. In year 1751–1752, two Portuguese men, *Manuel Rodrigues* and *Pascal Rujal* were appointed as *golandaz* (artillery men) at Purandar Fort. They were paid in kind: half a *maund* and one and a half *pyali* of rice,¹¹ 1 *pyali* pulses and a quarter *pyali* salt per month (Mahajan, 1980, p. 206). It means they got 106 kg rice, 4 kg pulses and 1 kg salt per month per head.

In addition, the higher ranks in the army, like the higher ranking civil servants, were compensated in a very diversified way. That was not the case for the lower ranks. Apart from the various modalities of wage payments, we learn from these military wage payments not only that minimum male wages in 18th-century Maharashtra were only ₹2 per month or 8 annas per week but also what the purchasing power (expressed in primary food articles) of the better paid artillery men was.

4.2.3. Private Wage Payments

Although the far majority found in the sources pertain to government officials, civil or military, we luckily do have some data on wages paid out privately that will be summarized in the following. They pertain to workers involved with the religious centres and temples, funded by government and private servants. The *Brahman* and the *Puranik* (the first for the rituals, the second specialized in the holy scriptures and their explanation), as well as the music player, the watchman, the peon, the waterman, the *gurav* (a priest for local deities), etc., were private servants of *Peshwa* family and other *sardars* (knights). We find their wages in the private papers of the upper class families, occasionally preserved among state papers in the state archives.

The diversity is enormous. At the top in one source (the ‘Satara Rajas’ and the Peshwa’s diaries’ for the 18th century), we find a cook, paid ₹1 a day (per month this would be ₹30!), apparently a top-class chef. His best assistant got half that wage, but the meanest among them only 1 anna per day or ₹2 per month. Brahmins who conducted religious ceremonies got 4 annas per day, or a fair ₹7 per month (Vad,

1908, p. 88). Cleaners received 3.75 *tankas* or *takas* (Vad, 1908, pp. 82–83). The wages of six *pies* for grinding one *pyali* (near about 4 kg) of corn, supposing that this work took one full day (Vad, 1908, p. 279).

In a second source (the ‘Tulshibagwale Daftars’)¹² of the second half of the 18th century, we see a variation among skilled labourers, with stone workers receiving between ₹4:10 (₹4 and 10 *annas*), carpenters receiving 3:8 and *ghisadi* (blacksmith) receiving 5:9 (in 1772–1773—Tulshibagwale Daftar) and ₹12:2 for 2 months of work, and among unskilled labourers (free labour and forced labour, *vethbegar*)¹³ between ₹2 and ₹7:2 per 2 months of work (Athawale, 1976, pp. 119–120).

A third set of documents, many published, such as the Peshwa’s diaries from the first half of the 18th century, shows a similar variety among the remuneration of male occupations, but is especially valuable because it mentions also female labourers (Table 4.9).

For the interpretation of these different denominations, we have to take into account that in this part of India and in this period generally ₹1 equals 16 annas or 24 takas or 48 paise or 144 rukas (differently said 3 rukas = 1 paisa; 2 paise = 1 taka; 3 paise = 1 anna, and 48 paise = ₹1) (Maheshwari & Wiggins, 1989, pp. 14–15). The variety here is even bigger than among the civil servants and the military that we have encountered before. Nevertheless, summing up then all different data from these three sets of sources for privately paid wages, we find female labourers at the lowest level who hardly could make ₹1 per month, virtually the same as unskilled labourers at ₹1 per month according to the *Tulshibagwale Daftars*.

Table 4.9 Privately Paid Wages in the Pune *Prant* in the First Half of the 18th Century

	Daily Wages	Monthly Wages
Female labourers	0.5 annas or 6 rukas	15 annas
Skilled worker	3 annas	₹5–10
Peon	2 anna and 5 rukas	₹4
Clerk	4 annas and 3 rukas	₹8

Source: Mahajan (1980, p. 206).

Elsewhere, the lowest grade of kitchen assistants earned ₹2 per month. A kind of middle category contains a peon at ₹4, cleaners at ₹4 and 3 annas (112.5 takas per month = ₹4 and 16 takas), but possibly also persons grinding grain (6 paise per day would mean ₹3 and 8 annas per month if our supposition of a workload of 7 kg per day is correct). The next category encompasses Brahmins at ₹7 and clerks at ₹8 as well as most other skilled workers.

4.3. MODES OF PAYMENT

We have already seen glimpses of the different modes of payment, which we have to consider here more in detail before we can take the step to express these nominal wages into real terms in the next paragraph. The following aspects will pass in review: (a) payment in kind or cash, (b) kinds of coins used in cash payments, (c) time units used for calculating wages and (d) frequency of payment.

4.3.1. Payment in Kind or Cash

Payments in kind, as we have seen, can be found not only at the top of the income pyramid but also at the bottom. At the top, we have seen already several examples, in particular the payment of part of the salary in the form of usufruct of land. In the same category falls the exemption of taxation as part of the remuneration. No tax was imposed on the houses of government salaried and skilled workers. In Pune city, *Sadashiv Sheth Kasar* was a skilled worker who received remission of house tax (Vad, 1911: II:7, p. 388). When a government servant ordered some food grains from some other part of the state, he could do so without paying octroi. This concession was taken advantage of by many of the officers of Pune, who brought rice from the Konkan region into Pune without paying octroi (Vad, 1911, p. 211). This facility was available for only the permanent workers and service holders; non-permanent workers were not entitled to this concession.

At the bottom of the pyramid, the remuneration of unskilled labourers and artisans was sometimes also given in kind (अडशेरी, *adsheri*) for occasional work, mostly for a few days, never as a regular government servant. Such payments in kind mostly consisted of four items: grain, pulses, red chili and tobacco. For example, one

day's work in 1811 and 1812 was paid 1 *ser* (1 kg) of *bajra* (pearl millet), 1½ *ser* (1.5 kg) of *tur dal* (a particular type of lentil) and 1 *ser* (1 kg) of red chili and tobacco together.¹⁴ The total value of these goods was not more than 1.5 or 2 *annas*, which if paid out in cash would result in a monthly salary of some ₹2.4–₹2.8. Payments in kind were also paid to a non-salaried hereditary class of non-skilled labourers, known as *Vethabigar*, who were just entitled to food or food grains. In 1793, government utilized 83 labourers to transport some load and gave food grains to each of them, worth ₹13:12, which works out to a cost of ₹2:65 per head (Athawale, 1976).

4.3.2. Kinds of Coins Used in Cash Payments

We saw already before that in theory the monetary system may look a bit complicated, but that as such the relation between the different monetary units was clear: ₹1 equals 16 annas or 24 takas or 48 paise or 144 rukas. However, in the sources, we encounter a bewildering variety of names of currencies: *Shahusikka*, *Malakapuri*, *Malharshahii*, *Fulacheri*, *Panchmela*, *chikodi*, *Chatarasingi* rupees, Gwalior *ganjikot* rupees, *Saroli*, *trishuli*, *bawadi*, *Gajapuri*, *Aurangabadi*, *Laturi*, *Aajameri*, *Ahmadabadi*, *Belapuri* and *Badodi Aurangabadi*, *Ahmadabadi*, *shetashahi*, *delhi-sikka* silver coins and *hon* and *Putali* gold coins. Besides, there were—very important for wage earners—copper coins by way of small change (खुर्द *khurda*): *ruka*, *paise* and *taka*. In reality, however, ₹1 (the *ankushi*) was universally used as the money of account, and not all coins were used for the same types of payments, and that certainly goes for wage payments (Divekar et al., 1989, p. 7). Problems could arise, however, from the fact that the ratios between gold, silver and copper fluctuated. Thus, the ratio of 48 paise per rupee may be taken as an average, but in specific years this could fluctuate. The government tried to remedy this problem to a certain extent by publishing in its general market price lists, known as the *Nirakh* (निरख), including the official rate of copper piece per silver rupee. In the *Nirakh* of year 1806–1807 of Pune *kasba*/market, ₹1 equalled 4 *taka* and 5 *rukas*. This is apparently a reflection of the fluctuating market price in that year, but it cannot be taken as a standard.

Workers preferred to be paid in coins they could use immediately in the marketplace for buying food and other necessities.

Table 4.10 Group-wise Payment of 13 Horsemen in 1789

₹: annas	Specification and Interpretation
162:0	<i>Malakapuri</i> ₹ (162 silver ₹, or more pieces if including fractions of ₹)
70:0	<i>Malharshahi, Fulacheri and Panchmel</i> ₹ (70 silver ₹, or more pieces if including fractions of ₹)
90:9	19 <i>Honas</i> (Gold coins)
22:0	1 <i>Mohor</i> (Gold coins)
344:9	

Source: Prant Ajamas Section, Rumal no. 426.

Therefore, they tried to avoid as much as possible the money changers for the exchange of silver rupees into copper coins. However, especially when wages were paid out group wise, this was impossible as a telling example from 1789 demonstrates. In that case, 13 horsemen as a group received ₹344 and 9 annas, which sum was specified in detail (see Table 4.10). The division into 13 equal parts of ₹26.5 per person unavoidably must have involved the help of money changers at a cost obviously.

4.3.3. Time Units Used for Calculating Wages

Most wage earners, and especially the better paid ones, received their money for the time (mostly units of one month) that they actually worked. Thus, 12 months payment for 12 month's work, 10 months' salary for 10 months of work, etc. In other cases, however, payment was noted down per year or per month, but not given for all 12 months of the year. Based on a study of the documents, it can be stated that there were four types or methods (*shirasta*/शिरस्ता) to pay the wages: 8 months' salary (*aathmahi*/आठमाही), 10 months' salary (*dasmahi*/दसमाही), 11 months' payment (*akramahi*/अकरमाही) and the normal 12 months' salary (*barmahi*/बारमाही). One document in which it is stated that workers were given a salary of 11 months against work of 12 months dates from 1801.¹⁵ Then a *bargir* (horseman), named *Ramji Kod*, received ₹65, in which sum was calculated at ₹6 per month for 11 months, totalling ₹66, from which ₹1 was deducted for *karkunee* tax (the tax for calculation of salary); therefore, he got ₹65.¹⁶

4.3.4. Frequency of Payment

The frequency of wage payments for the higher governmental ranks (*shaahii shirasta*/शाही शिरस्ता) and military commanders or knight (*sardars*) was different from that for the lower ones. The higher rank officers received their salaries only once per year, whereas the lower ranks received it per month.¹⁷ Sometimes, the frequency of payment was even lower when, especially for the higher authorities, only part of the annual salary was paid. The other part was deposited in the government treasury and received only after 2 or 4 years of continuous service or honourable resignation from office.¹⁸

Another exception to the rule of regular payment was advance payments, both in cash or in kind. For weddings or any other ceremonies in the family of an employee, the government gave an advance in kind known as *Patravali*, which was in the form of a lunch plate. Probably because of the risks involved, advances were also allowed to spies, for example, when in 1812 a detective was sent to the *Konkan* area during the campaign of the *Peshwa*, he received an advance of no less than two months (₹8), plus ₹1 extra for inflation, so in total ₹9.¹⁹

Most ordinary workers were, however, paid by the day if daily wage earners, and per month if engaged permanently. Some, however, got their *rojmara* per one-and-half month, by dividing 12 months into 8 parts, each of one and half months (Chapekar, 1937, p. 15). Sometimes even the salary was distributed after two months and, in this way, six shares of the 12 months were distributed (Chapekar, 1937).

There were also fixed customs for the dates and days of salary distribution at the *Chavadi* (चावडी) or salary office in the village or town or on the fort. In the latter case, it was distributed on the day of full moon (*Chandraat*). There existed also a preference, undoubtedly, also among the workers themselves to be paid on festival days such as *Deepawali*, *Akshay Tritiya* and *Nagpanchami* (festival of snakes; Chapekar, 1937, p. 15). According to the records of the *Tulshibagwale* family, in 1773, ₹700 was distributed as a *Deepawali* share of wage payment. In 1792, ₹700 was distributed as a second share of wage payment on the fort *Purandar* (Chapekar, 1937, p. 55).²⁰ In 1779, ₹500 was paid as a wage payment on the occasion of *Nagpanchami* (Chapekar, 1937, p. 56).

4.4. FROM NOMINAL TO REAL WAGES AND TO A STANDARD OF LIVING

Occasionally we have already encountered information on consumption and real wages (at the end of Section 4.2.2 and in Section 4.3.1), but here we will try to discuss it in a more systematic way, especially for the lowest income groups as these are most numerous and therefore, to a great extent, general welfare levels. However, it will be impossible to address the latter here fully as we have not studied the income of the farmers and peasants by large the most numerous occupational groups.²¹

Keeping this in mind, it is important to stress that we have not found firm indications of rising or diminishing wage levels (see Table 4.5). The purchasing power of the wages therefore will have depended mostly on the price level of bread grains (see Table 4.11 and Figure 4.2).

Table 4.11 Prices of Food Grains, Pune 1760–1765 to 1816–1820

Year	Kg of Millet per ₹	
	Jowar	Bajra
1760–1765	26.57	21.26
1766–1770	19.80	21.14
1771–1775	24.07	19.04
1776–1780	22.62	21.83
1781–1785	29.26	27.68
1786–1790	25.30	22.30
1791–1795	17.62	14.89
1796–1800	16.48	14.90
1801–1805	21.04	14.84
1806–1810	19.59	18.31
1811–1815	20.87	17.91
1816–1820	23.72	18.56

Source: Divekar (2000, p. 554).



Figure 4.2 Movement of Prices of Millet (Kg per ₹), Pune 1760-1765 to 1816-1820

Source: The author.

These are only available from 1761 onwards. They show especially a deterioration (i.e., less kg of both jowar and bajra after the most favourable quinquennial average of 1781-1785 which must have hit the wage earners very hard and lasted until the end of the century, after which a slow recovery took place, only to reach again the early 1780s level in the 1820s).

In order to understand what this meant to those with the lowest wages (as we saw males earning ₹2 per month and females half of that), we have two sources of information. T. T. Mahajan, in his unpublished thesis on Maratha economy and commerce, calculated that in the 18th century, one meal composed of rice, butter, ghee, *chapatis*, vegetables and a sweet dish, etc., for a family of 5 members costing 7 annas or ₹13.2 per month. From all the wage data, we have seen it is clear that hardly any wage worker could afford such a diet.

If we come to the food habits of ordinary people, the meal consisted of *bajra*, *jowar*, wheat and rice. For this meal, one family of 5 persons needs only 30-32 annas or at most ₹2. As we have seen, such an utterly simple and therefore deficient diet was in the reach of nearly all wage earners, but then we forget that a human being also needs clothing and shelter.

This becomes clear when we look at the maintenance costs of slaves. In the 18th-century Maratha state, we encounter some slaves,

especially at the forts (note that the death of a slave was recorded as a financial loss of the property of the fort). These slaves of course were not paid wages, but only received food, shelter and clothing. Once a year, female slaves got two new *saris*, two blouses and one blanket per year. Male slaves got three types of cotton clothes, a blanket and a leather slipper. Their food consisted of grains, pulses, salt, oil, ghee and jaggery. The total value of all these goods and food (known in the documents as *Ajamaas*/अजमास) was calculated in 1811–1812²² about ₹15–18 per year (0.7 to 0.8 annas per day).

Taking into account that the fort authorities most likely could purchase these goods at a lower price than at the market because of their position and because they ordered them in bulk, in the second half of the 18th century to which most of our data pertain, a wage earner without a family and without costs of shelter and other necessities would therefore need to earn at least more than one-and-a-half rupee per month. ₹2 seem to be a safe estimate for the minimum needs of an adult. For a family, more was needed, and this is possibly reflected in the wages in kind that we discussed before (at the end of Section 4.2.1), which converted into money boiled down to a monthly wage of ₹2.8–3.8.

Feeding a family at ₹2 was therefore out of the question and the labouring poor could only survive on the condition that their spouses also worked for wages. The earnings of a couple taken together, and possibly increased by some earnings of children, might have been just enough to survive in normal times, but not in case of any mishaps, and especially the end of the 18th century and the turn of the century must have been tough. Unfortunately, without further research, it is impossible to say anything about real wages before the mid-18th century.

4.5. SUMMARY AND CONCLUSION

This is a first, and therefore limited, attempt to come up with wage data for Maharashtra in the 18th century. Following pioneers like Divekar et al. (1989) who did so for commodity prices in the Pune market from 1761 onwards, but unavoidably in a much more restricted way, we have culled available archival documents and a handful of unpublished PhD theses from Pune University to come up with a first, admittedly impressionistic picture.

It is important to stress that the archival sources from the Peshwa archives, used here, are extremely rich and at the same time utterly neglected so far because, unfortunately, most historians depend nearly solely on English language sources when writing about Indian history of the 18th and 19th centuries.

The main result of this first inventory of wage data is threefold. First, wages and also wages paid out in cash were important in this period. Many depended on them. Second, the wages levels at the bottom of the income pyramid, the majority of the wage earners, make us feel rather sad because at least from 1761 onwards (earlier on no price data have been made available so far), they seem to have been just at the bare minimum to survive. From the early 1780s, they even deteriorated until the early 19th century. This brings us to the third conclusion that the recent revisionist optimistic view of the 18th-century Maharashtrian economy finds no confirmation in this study of real wages. Yes, Maharashtra witnessed a well-developed market economy based on cash payments but, awaiting further research, it is highly questionable whether the majority of the waged population profited from it.

GLOSSARY²³

1. *Aasami* आसामी: Person or persons
2. *Adasheri* अडशेरी: Grain given as wage for his subsistence
3. *Ajamas* अजमास: Estimate, computation, rough calculation and conjecture
4. *Baddal mushahira* बदल मुशाहिरा: It's a title for salary in statement of expenditure of government
5. *Barakhandaj* बरखंदाज: A musketeer or a matchlock-man
6. *Chougula* चौगुला: An officer of village to help the *patil* or village headman
7. *Golandaj* गोलंदाज: A gunner or a bombardier
8. *Kamavisadar* कमाविसदार: The head collector of revenue
9. *Mahajan* महाजन: A hereditary officer in a village, *kasba* or city. His business is to superintend the trade of, and to assist in collecting the tax form, certain classes of traders.
10. *Prant* प्रांत: Subdivision of a country, a district, county or a shire

11. *Puranik* पुराणिक: (a) A Brahman well read in the *Puranas*; (b) a public expounder of them
12. *Rojmara* रोजमरा: Wages, hire and pay
13. *Sabnis* सबनिस: Head clerk attached to one of the officers. His business was to pay the soldiers and public servants of a district or charge.
14. *Sadilwarpatti* सादिलवारपट्टी: Any contingent charge paid by an extra assessment, also such extra assessment
15. *Sarnobat* सरनौबत: Master of the force on any place, especially on the fort
16. *Shahi-shirasta* शाही-शिरस्ता: Royal method of payment or salary for higher ranks
17. *Shete* शेठ्ये: An officer in mart or commercial town. He has superintendence and regulation of the weight and measures and of the traffic, perfect of the market.
18. *Swarajya* स्वराज्य: Reign conquered by Chhatrapati Shivaji and formed a native state was called Swarajya
19. *Tainat* तैनात: (a) Military charge or command; (b) stipend or salary and (c) charge, trust, custody; care of keeping of; management or direction; control or authority over (things, business, person)
20. *Varat* वरात: An assignment or order upon the revenues or treasury
21. *Vetan* वेतन: Salary
22. *Vethabigar* वेठबिगार: A comprehensive or careless term for labour or service exacted without remuneration.

NOTES

1. *Prant Ajmas, Rumal* no. 26.
2. *Prant Ajmas, Rumal* no. 26.
3. *Prant Ajmas, Rumal* no. 26.
4. *Prant Ajmas, Rumal* no. 1.
5. *Prant Ajmas, Rumal* no. 1.
6. Pune Archives, *Rumal* no. 26.
7. Pune Archives, *Rumal* no. 26.
8. *Prant Ajmas, Rumal* no. 26.
9. *Prant Ajmas, Rumal* no. 26.

10. Today, the word *porga* is used to mean 'boy' or 'helper', as a slang word.
11. One *Pyali* is approximately 4 kg.
12. The Tulshibagwale were a family of bankers who were closely associated with the Peshwas from the second half of the 18th century.
13. This was a form of forced labour that was widely practised. Members of the lower caste were required to do whatever work was given to them by the upper castes or by the local officials, without payment, except for cooked food or food grains for the period of the work.
14. *Prant Ajmas, Rumal* no. 113, Fort Purandar.
15. *Prant Ajmas, Rumal* no. 113, Fort Purandar, p. 15.
16. *Prant Ajmas, Rumal* no. 113, Fort Purandar, p. 53. Anyone who got a salary had ₹1 deducted from the salary because they were paid a salary. In some ways comparable to the modern professional tax.
17. *Prant Ajmas, Rumal* no. 113, Fort Purandar, p. 15.
18. *Prant Ajmas, Rumal* no. 26 and 113.
19. *Prant Ajmas, Rumal* no. 26 and 113, p. 264.
20. *Prant Ajmas, Rumal* no. 26 and 113, p. 55.
21. See the contribution by Jan Lucassen to this volume.
22. *Prant Ajmas, Rumal* no. 113.
23. All definitions from Molesworth's *Marathi-English Dictionary*, corrected ninth reprint, Shubada-Saraswat Prakashan, Pune.
24. These are a series of 12 volumes published at the beginning of the 20th century, which contain excerpts from the Modi documents.

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WAGES IN SINNAR PARGANA DURING THE 18TH CENTURY

Anjali Soitkar Vekhande

5.1. INTRODUCTION

The financial system of the confederate Maratha Empire (1674–1818) under its prime ministers or *Peshwas* has still been hardly explored. This is to be deplored because this empire is thought to have been not only a successful political but also prosperous state.¹

Under Chhatrapati (king) Shahu Bhonsle I, who reigned from 1708 to 1749 from Satara, the *Peshwa* already held a prominent place in politics. Later on, the capital was shifted to Pune and the *Peshwas* became the de facto leaders of the Marathas, and the Chhatrapati was reduced to a nominal ruler. The central government under the king and the *peshwas* was a mixture of centralized bureaucracy levying different kind of taxes in the parts of the country under direct government, known as *kamavisi mulukh*, and feudalism in the territory under *saranjami mulukh*, that is under the rule of a handful of landlords or *saranjamdar* supervised by the government.²

In view of the lack of modern economic historical overviews of this empire, exploratory and detailed studies on local administrative levels are necessary. This chapter throws light on the actual pattern of the financial system as an example of the

Peshwa government. The Maratha state was divided into *subhas* and *prants* or provinces, many of which were inherited from the Mughal empire. The *prants* were further subdivided into several *parganas*.³ Here, I will concentrate on one *pargana* in the centre of the Maratha empire, Sinnar *pargana*, one of the 11 *parganas* that were in Subha Sangamner. This was part of the province known in Mughal documents as *Khujaste buniyad* until 1760, and later under Prant Gangthadi.⁴

Such an exploratory study depends on untapped sources available in the Pune archives, better known as *Peshwa Daftar*. These contain an immense collection broadly classified in *rumals* or bundles of documents, wrapped in cotton cloth. All these documents are written in the Maratha language, spoken in Maharashtra and rendered in Modi script. This originated as a cursive variant of the Devanagari script and was used until 1950⁵ in Maharashtra when it was replaced by the modern Devanagari.

The *rumals* used for this chapter in particular are to be found in two series, covering the period 1707–1818: the *Nagar Jamav Daftar* and the *Sannika Daftar*.⁶ They contain many wages and also price data that have been collected here in an exploratory and exemplary, but certainly not in an exhaustive way. At this stage, the documents chosen are those that deal with the revenues of the state, particularly the accounts statements. A more exhaustive study will almost certainly yield more results. At the same time, they also throw a light on the socio-economic history of this *pargana* at large. I will proceed as follows: after a brief introduction of the character of the taluka (Section 5.1), I will explore the wages paid out to the different categories of civil servants and workers, as well as some modalities of wage payment (Section 5.2). In order to know what the purchasing power of these wages was, I will compare them to the prices of important food items (Section 5.3), and finally I will try to draw some preliminary conclusions.

5.1.1. Sinnar Pargana and Its Socio-economic Character in the 18th Century

Situated 28 km east of the important town of Nasik and about 200 km north of the capital Pune for long, Sinnar town and *pargana* belonged to the northern border region of the state where it met

the Mughal territories (many of which were incorporated after ca. 1700). No wonder that until the middle of the 18th century, both Mughals and Marathas were holding *mokasa* rights in Sinnar *pargana*. *Mokasa* was the state share in the revenue after deducting the quarter or *chauthai*.

Sinnar *pargana* consisted of one small central town, the *kasba* of Sinnar, surrounded by 14 administrative village units. These fiscal units at the lowest level, called *dehe* or *mauja*, in fact, could encompass more than one local population centre. Sinnar *pargana* counted nine of such smaller neighbourhoods, called *vadya* or *majre* (see Figure 5.1). A number of villages or *dehe* together could form a *mahal*. Sangamner Subha had 11 *parganas*, one of which was Sinnar. Sinnar had 14 villages and one *kasba*, Sinnar kasba, which was also sometimes called *kasba* Majkur.

Sinnar *pargana* is situated on the tableland immediately east of the Sahyadri Hills, better known as the Western Ghats, running

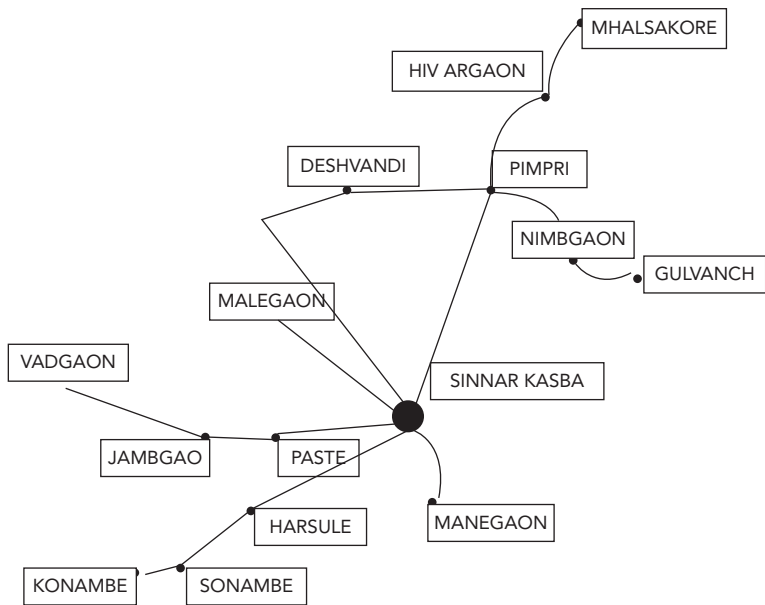


Figure 5.1 Sinnar Pargana with Its 14 *Dehe* (Villages) and *Kasba* Sinnar (1707–1818; Not to Scale)

Source: The author.

from north to south along the Indian Ocean. Its capital with the same name has an average elevation of 650 m. Geographically, Sinnar is a fertile *doab* land between two major rivers running east-southeast from their springs in the Western Ghats, the mighty Godavari and its southern tributary, the Pravara. It was also denoted as *doab pradesh* by the famous Malik Amber.⁷ The taluka is watered by several other minor rivers, such as the Mahalungi, Shivnadi, Devnadi and Saraswati. Due to this natural irrigation, most of Sinnar taluka was a prosperous and fertile region as witnessed by many an ancient copper plate inscription. For example, the Asvi copper plate issued in 1098 AD mentioned that Sinnar (there called Sindiner), was a prosperous part of Seundesh.⁸

No wonder that apart from bread grains, the region raised and exported specialized agricultural products, in particular betel leaves, for which Sinnar is famous.⁹ Betel leaf (bundled in sheafs) is mostly consumed as betel quid or *paan* and is traditionally offered as a mark of respect and on the occasion of auspicious beginnings. Many labourers were working on the betel farms for reaping which was termed as *katani*.

We also have incidental indicators of economic activity and investment in land or in new constructions as a few examples will illustrate. In 1747, Ramji Mahadev Biwalkar, the Subedar of Kalyan, who owned a house in Pune, who already had his own house in Pune, constructed a new house in Kalyan in 1769. He also constructed one more house in Thane for ₹18,000, the land which was bought from Malharshet Sonar.¹⁰ In 1797, Rajashri Daulatrao Shinde wrote a letter to Malharrao Bhikaji at Sonambe in the south of Sinnar *pargana* telling him that he was going to invest in the construction of a new house.¹¹ Also investments in bulls and wells are documented.¹²

The economy of the *pargana* may have experienced short-term fluctuations but, in the long run, especially the agricultural production seems to have been rather stable if we may take the annual revenue collections between 1756 and 1818 as a yardstick (Table 5.1). Our only indication of the population comes from some documents relating to revenue settlements, according to which the population of Sinnar in 1737–1738 was 9,000¹³; therefore, accurate correlation between production and revenue is difficult at this stage.

Table 5.1 Revenue Collection (*Ain Jamabandi*) of Sinnar Pargana, 1756–1818¹⁴

Year	Revenue (₹: Annas : Paise)
1756	57,221: 06 : 3
1758	55,625: 09 : 2
1759	54,095: 08 : 0
1760	58,315: 00 : 0
1761	40,355: 00 : 0
1762	41,766: 00 : 0
1763	39,141: 00 : 0
1764	48,138: 09 : 1
1765	52,033: 08 : 0
1766	55,763: 00 : 0
1767	53,255: 00 : 0
1768	50,544: 05 : 0
1769	41,122: 00 : 0
1770	46,323: 10 : 0
1771	49,049: 13 : 0
1772	48,652: 14 : 0
1773	33,459: 12 : 0
1774	52,238: 00 : 0
1775	57,525: 00 : 0
1783	52,515: 01 : 0
1786	60,375: 01 : 3
1791	60,001: 00 : 0
1792	60,025: 00 : 0
1795	60,482: 01 : 1
1804	42,720: 00 : 0
1805	49,512: 00 : 0
1806	49,589: 00 : 0

Year	Revenue (₹: Annas : Paise)
1807	52,338: 00 : 0
1808	45,795: 00 : 0
1809	45,848: 00 : 0
1818	55,000: 00 : 0

Source: Pune Archives, Nagar Jamav Daftar, 2167, 2168, 2169, 61023.

5.2. WAGES

From the documents studied so far, wage data could be collected, referred to as *mehantana*, *rojmara*, *vetan*, *majuri*, *moeen* or *Amala*. I will distinguish between three types of wages: those of high Taluka officials (5.2.1), those of medium and low Taluka officials (5.2.2), and market wages of ordinary and unskilled labourers (5.2.3). The fixed salaries of the two first categories were paid from the king's treasury (*huzur vilhe*).

5.2.1. Salaries of High Taluka Officials

The chief officer of the Peshwa in each pargana was termed *mamlatdar* or *kamavisdar*, with the former being used if the annual revenues of the pargana exceeded 1 Lakh, and the latter for any sum lower than that. The territory he was responsible for was called *kamavisi mulukh*. From Table 5.1, it follows that Sinnar pargana was headed by a *Kamavisdar*. One of his main duties was to collect the taxes. He got salary per annum as well as other allowances and, besides, many facilities like other high officials (see Table 5.2). Their precise content depended on their rank and importance, like the usage of a *palkhi* (palanquin), torchbearers, personal attendants or domestic help.

Next to the *Kamavisdar* came a group of officials, collectively called the *darakdar*. The central government paid their salaries also, which can be found in the records in the *Baddal Mushahira* column and *Ek Berji* account. This *darakdar* was comprised of the following functionaries: the *phadnis* or *chitnis* who looked after the accounts and correspondence, the *daftardar* who prepared the annual estimate of the income and expenditure of the mahals, the

Table 5.2 Governmental Income of Some *Kamavisdars* of *Sinnar Pargana* from 1758–1759 to 1795–1796¹⁵

	Name of the Kamavisdar	₹ per Year		
		Fixed Salary	4% of Revenue (Table 5.1)	Total
1758–1759	Anandrao Jivaji	500	2,225	2,725
1783–1784	Bhikaji Govind	400	2,100	2,387: 01: 5 (2,500)
1795–1796	Pandurang Dhondoji	240	2,419	2,659

Source: Pune Archives, Nagar Jamav Daftar, 2168.

Table 5.3 Salary per Annum of *Majumdar* and *Phadnis*¹⁶

Year	Name of the Majumdar	Salary	Name of the Phadnis	Salary
1758–1759	Ramchandra Anant	250	Krishnaji Anuji	400
1783	Bhaskar Govind	250	Govindrao Yadav Jagar	400
1795	Bhaskar Govind	250	Jagannath Krishna	400
1796	Bhaskar Govind	250	Govindrao Yadav	400

Source: Pune Archives, Nagar Jamav Daftar, 2167, 2168, 2169.

mazumdar who balanced the day books and maintained the salary registers of soldiers and horsemen, the *jamenis* who kept systematic revenue records and finally the *thanadar*, *kotwal* or police officers. Besides, these officials also had to supervise the landlords (*saranjamdar*), who as feudal lords in the name of the king ruled the *saranjami mulukh*. Of some of them, we will give their salaries (see Table 5.3).

Besides these fixed salaries, *majumdars* and *phadnis* also were entitled to various important allowances and facilities, like *palkhi* (palanquin). Sometimes they also were allowed advances (*nalbandi*). In 1796, the *phadnis* Govindrao Yadav received an advance of ₹100 as *nalbandi* for 'personal reasons'.¹⁷

It is difficult to draw conclusions from these high salaries of a handful officials, except that the Maratha state paid its servants well even at such a low level of the administration. This made sense of course as they were the ones who were responsible for the tax collection. However, these figures tell us insufficiently about the total income of these men. While on the one hand, these officials would have had income from land (on which there is at present no information), on the other, their expenses may have been high, because they would have had a substantial staff to maintain.

5.2.2. Salaries and Wages of Medium and Low Taluka and Village Officials

Of course, the income of these high officials at taluka level do not tell us much about the welfare of society at large. Therefore, we will now turn to the incomes of medium and low taluka and village officials (in the records invariably to be found in the *kharch* or section on expenditure).

The highest pay was received by the various clerks (*karkun*; also called as *madatnis* or assistant), even if it varied considerably, possibly depending on the hereditary official (*vatandar*) they served (see Table 5.4).

Table 5.4 Annual Wages of Clerks, 1758–1786

Name of Clerk	Official They Assisted	1758 ¹⁸	1783 ¹⁹	1786 ²⁰
	Yesaji Khanderao	150		
	Bhikaji Anant	100		
	Krushnaji Jivaji	75		
	Anand Ganesh	25		
Balaji Gopal			114:02:2	
	<i>Havaladar</i> (revenue collector of small villages) ²¹		84	30
	Kamavisdar			50
	<i>Daroga</i> (chief of the police)			42

Source: Pune Archives, Nagar Jamav Daftar.

The best paid clerks received a nice salary of some ₹10 or even more per month. The lowest echelon, however, earned only between ₹2 and ₹4 per month, hardly enough to subsist upon as we will see, unless supplemented by other sources of income.

Comparable to the clerks are the soldiers, wages of *shiledar* (a soldier who possesses his own sword and horse), *pyade* (foot soldiers), *bargir* were all paid from *Huzur Vilhe* (from king's treasury) or sometimes by their assignee. They were also paid yearly or sometimes monthly or after everyone and half months or even after 2 months. For example, in 1795, the *saranjamdar* Malharrao Pawar appointed six *shiledars* in the following *maujes*, whom he paid once a year.²² Again possibly related to variations in revenue, not all sums were the same: ₹250 for the shiledar at *Mauje* Vadgaon, ₹200 for the one at Manegaon, Jambgaon, Paste and Malegaon, and ₹150 only at *Mauje* Deshvandi. Another *saranjamdar*, Yadavrao Pawar, paid the following annual wages sums to his *shiledars* in his *maujes*:²³ ₹250 at Mhalsikare and Harsule, and ₹200 at Gulvanch and Hivargaon. It has to be noticed that this sum most likely included the maintenance costs of the horse, especially fodder.

Apart from this sum, the *shiledars* had to pay out their *pyade* (foot soldiers) once a year (the higher ranks) or sometimes every two, one-and-a-half or one months (in these three cases, the pay was called *rojmara*). How much the lower ranks could earn becomes clear from the following example. In 1774–1775, the government was informed that some treasure had been found by Jiwaji Pachora, a *kunbi* or farmer of Sinnar *pargana*. Sadashiv Babaji *shiledar* was sent to enquire into the matter, and he took with him three *pyade* to assist him. Although they were unable to trace the treasury, this small and unlucky expedition provides important information for us (see Table 5.5).

Incidental payments to higher ranking military payments point in the same direction. In 1777–1778, Nimbaji bin Tukaji Pawar was sent to Satara on a salary of ₹12 per two monthly *rojmara* for the training of the Raja's son in the use of the sword.²⁴ And, in 1809, a soldier, the son of Chatursing Bhosale, *vatandar* of Vavi (located by the side of Sinnar *kasba* and now a days it is found in Sinnar), earned ₹40 per year, paid out by way of monthly *rojmara*, and a

Table 5.5 Wages Paid in One Military Unit, Headed by a *Shiledar* in 1774–1775

Name	Rank	Period	₹ per Month	₹ per Year
Sadashiv Babaji	<i>Shiledar</i>	<i>Rojmara</i> (monthly)	15	180
Himmat Abdulla	<i>Pyade</i>	<i>Dumahi</i> (two-monthly)	6	72
Devaji Valad Kusaji	<i>Pyade</i>	<i>Dumahi</i> (two-monthly)	3	36

Source: Vad and Marathe (1907, p. 69).

colleague, called Nagu Gurav, earned twice as much and therefore will have had a higher military rank.²⁵

Individual variations in payment for soldiers may be explained by individual qualities, particularly fitness. In 1750, Raje Mohammad, head of *hashams* (attendants), had been sent to Khandesh to enlist 50 recruits, to whom he might promise a salary of ₹7 or ₹8 according to their ‘stoutness’ to be paid as-one-and-a-half monthly *rojmara*, meaning some ₹5 per month.²⁶ Somewhat lower was the remuneration of a body of 25 watchmen at ₹4 for one month, deputed to protect the village Sukane after it had been attacked and plundered by the dacoit Narsoji Jadhav in 1766.²⁷

On the lowest level in what we might term the security branch stood the village and road watchman, mostly executed by a *Bhil*, a member of the most populous ‘tribal community’ in that part of India.

A *Bhil* watchman of Patta fort in 1783 earned ₹14:5 per year, or about ₹1:3 per month. This was very low as compared to a soldier who at the same time received for the same work ₹11:7:3 per month.²⁸ Another *Bhil*, whose name was Dangre, was paid as a watchman in 1790 even less: 9 annas per month (or annually ₹6:8).²⁹ Like other wage earners, also watchmen used to be paid out on the occasion of festivals. In 1783, on the full moon day, a religious fair was held around the *Bhairav Nath* temple in Sinnar, when also a group (we do not know how many) of watchmen were paid together ₹97:8.³⁰

A special function that may be placed in the same governmental sector was that of spy (*jasus*), in the sources also called

messenger (*sarkar rujuvatis*). In 1766–1767, four *jasus* were appointed in Burhanpur which was the part of Maratha empire but far away from Sinnar, with Chintaman Hari and Vithhal Moreshwar and paid one-and-a-half monthly *rojmara*.³¹ Three of them (Maloji Bapuji, Harji Nagoji and Mavji Yesaji) earned ₹6 and one ₹6:8, so half a rupee more. In 1783, a *jasus* named Govind Anant was paid even slightly better at ₹84 per year, or ₹7 per month.³²

Finally some religious functions, remunerated by the central government, exemplified by the small Muslim and the majority Hindu communities residing in Sinnar *kasba*, though these data are not always easy to interpret. The butcher (*khatik*) of the public abattoir for Muslims, where cattle and sheep were slaughtered, earned 10 annas per day, resulting in no less than ₹18:1 per month.³³ Maybe from this sum, he also had to pay one or more assistants, at least as we compare this to the highest Muslim official at Sinnar (the *Khatibe Qazi*) who was paid ₹63:4 for his daily duties in 1782, which is slightly more than ₹5:4 per month.³⁴

This is in the range of what we might expect, when he received ₹867:8, which included ₹100 as *Eidi Milan* that means a gift in the form of money for the festival Ramadan, as annual payment he got ₹531 and remaining ₹236 as his last year pending salary (*sal gudasta*).

The few data on remunerations for the performance of Hindu ceremonies allow even less conclusions. For worshipping and executing *puja*, wages were paid in several ways. In 1783, a *gramjoshi* (a fortune teller or a public servant of a village entitled *Balutedar*) was paid on three different occasions. First, ₹1 for his service of *Panchang Shravan* (almanac hearing) during the festival of *Deepavali*.³⁵ Second, the same sum for worshipping God on the occasion of the *Dusshera* festival, as well as all collected offerings. Third, ₹3 for *Hari kirtan* (storytelling with praise songs of Hari Krishna). In 1812–1816, *gramjoshi* was paid ₹1 for worshipping God and performing *puja* (ritualistic worship of deities) on daily wages.³⁶ It is impossible to know what the total income of such religious functionaries was.

To conclude, low-level civil and religious functionaries in Sinnar *pargana* in the second half of the 18th century earned on

average between ₹3 and ₹6 per month. The *Bhil* watchmen with substantially lower wages are here the exception to the rule. Let us now turn to market wages, by definition much more common and therefore much more representative than those of officials.³⁷

5.2.3. Market Wages of Ordinary and Unskilled Labourers

Wages of unskilled workers varied according to gender, professional abilities and possibly some other factors such as caste, which are, however, not given in the documents. They were paid in cash or sometimes in kind, the first called *nakhta* and payment in kind—mostly grain—was called *gallakaili* (*galla* means grain and *kaili* means measurement). We will discuss the one after the other.

A problem sometimes arises when group wages are mentioned which cannot be reduced to individual wages. In 1783, a group numbering an unknown number of labourers was paid group-wise ₹140:6 for cutting the grass of Sali Kagai, Raghuchya Bagat and Aramas, all meadows belonging to Sinnar *kasba*.³⁸ Even when we know that in 1763 the rate of the annual grass cutting of the Sinnar government meadows was ₹4 per 1,000 bundles of grass,³⁹ we can calculate that 20 years later 350,000 bundles of grass had been harvested, but not how much money had been earned by an individual harvester. Also, other piece rates are difficult to convert into meaningful time wages. Both in 1757 and 1795, the rate of the important betel leaf harvesting (see Introduction) was ₹1 per *katani*, as documented for all 14 villages. So long as we do not know how much time was spent by one labourer in harvesting one *katani* of betel leaf, we do not know what this source of income meant for the income of these labourers and their families.

Let us now review what is available about wages of artisans and day labourers. To start with the top, surprisingly we find a woman—alas the only one so far in the sources that I have consulted. By profession, she was a dancer (*kalavantin*), and we even know her name, Reva, who in 1764–1765 was paid ₹150 on the basis of one-and-half monthly *rojmara*. This indicates that dancing was a full year's profession on the *rojmara* basis for entertaining people.⁴⁰ She must have been very talented, but also other dancers

were well paid, for example, two other dancers are mentioned, who received half of her pay. These were called Soni and Jani who on the occasion of *Holi* festival (festival of colours) in 1783 were called for the entertainment of people and were paid ₹13:12.⁴¹

In the same range, we also find a man, the painter Mankoji Chitari, who in 1764–1765 was engaged to ‘draw pictures’ (the document gives no further information) for ₹20 per month (in fact, ₹30 per one-and-half monthly *rojmarā*). This obviously was a highly skilled craftsman.⁴²

Much more common were wages for skilled craftsmen of about ₹4–6 per month, witness charges on account of 3 tailors working for 2 days in 1749–1750 for ₹2:0:2 for stitching *sadara* (shirts).⁴³ Per person per day, this would mean ₹5:5 per month. Similar wages for skilled craftsmen were paid in the building industry. In 1782–1783, one mason and 25 labourers were employed on road construction. From the 11th day of *Muharram*, the mason and four labourers were paid ₹7:8, while the rest of the labourers got ₹4 each.⁴⁴

Whereas wages for skilled artisans and professionals in the market or private sector seem not to have diverged substantially from those in the governmental one, both civil and military, they were much lower for unskilled day labourers, most of whom employed in agriculture. Standard wages for farm labourers were half an anna per day, or ₹1 per month or ₹12 per year.⁴⁵

But it could be even less, depending on one’s caste as demonstrated by the fate of the *kunbin* and *rabata mahar* who were employed for domestic work. *Kunbin* was a female and *mahar* was a male domestic servant and *rabata* means labour. The *mahar* was a caste considered as an untouchable community. *Rabta mahar* used to work in many fronts and they were paid either in kind or in cash on a daily basis. In 1783, a *kunbin* was paid on average ₹8:1 per year (or less than 12 annas per month) and a *rabata mahar* only ₹6:4 (or somewhat more than 8 annas or half a rupee per month).⁴⁶ These domestic servants were generally paid on the festival day, but even if they received in addition occasionally *aadsheri* or a gift of two and half *ser* of grain, such wages were far too low, as we will see in the next section where we will learn of a wage in kind of one *ser* of grain per day for a *kunbin* and substantially more for low government officials. Such wages paid in kind will tell us more

about the purchasing power of all the remunerations that have been listed so far.

5.3. THE PURCHASING POWER OF WAGES

Two methods are available to jump from nominal to real wages, first the analysis of wages paid in kind, and second the analysis of market prices of daily food items. A third one, budget studies, is unfortunately not available for this case study.

A proper payment of wages in kind depends also on good governmental care of uniform weights and measures. This was also important for payment of revenue in kind. In the Maratha state, this measurement of grain when levied for revenue and for the payment of any worker was different. In 1742–1743, the revenue ‘in kind’ to be levied in *prant* Rajapuri (south-west of Sinnar) was ordered to be paid by using a measure specially sent from the king’s treasury (the *huzur*). The grain to be paid to the servants in their wages was to be measured differently, less than the above one by a quarter of *ser* (equal to 0.93 kg here).

If paid in kind, lower governmental officers received no less than 2.5 *ser* of grain per day. In 1765, for example, Morbat Garge and Ranjbhat Garge Tisgaokar were sent to Rajaram Govind, most probably in charge of the fortresses of Bitinga and Patta, who was ordered to give them two and a half *ser* grains per day *aadsheri* or salary in kind. In view of what we know already of the low status of the *kunbin* was, we will not be surprised that they were given much less. In 1770, for example, the *kunbin* employed for domestic work in Baloji Kadam’s house was paid one *ser* of grain on a daily basis.⁴⁷ The document does not tell us who Balaji Kadam was, nor what kind of domestic work was being done.

For the second approach to real wages, price data of the main food grains are available from the middle of the 18th century, an isolated one for 1751–1753, and a continuous series for Pune from 1761 onwards, published by D. V. Divekar and colleagues. In 1751–1753, during the war between Salabat Jung Nizam and Peshwa Balaji Baji Rao, French soldiers rested for a while in Sinnar. There they had to buy their food as recorded in a French manuscript which was translated in English by Sir Jadunath Sarkar. Rice was sold to them at ₹1 for a quarter *ser* and little bajra and ragi for six *fanams* per day.⁴⁸

Table 5.6 Prices of Agriculture Commodities in Sinnar

For ₹1 in Ser Year	Rice	Wheat	Gram
1752	4	–	–
1772	8	–	–
1773	12.75	–	12.25
1774	8	24	24
1775	10	24	20
1790	6	16	16
1792	4	5	6
1793	3	4	4
1795	8	16.50	16
1804	2.25	3.25	30
1805	7.75	9.25	6.50
1806	6	14	9
1807	8.75	24	24
1808	20	–	–
1809	20	–	–

Source: Pune Archives, Nagar Jamav Daftar, 2167, 2168, 2169 and Etheridge (1868).

Note: Divekar et al. (1989) use the report of Etheridge for the prices in Pune. Here, I have used the *Nagar Jamav Daftar*, which includes papers collected by British administrators from various *parganas*, mahals and villages from Ahmednagar district officials and village accountants for purposes of alienation. During British period, Sinnar was included in Ahmednagar district, not Pune district.⁴⁹

5.4. CONCLUSION

In this chapter, Sinnar *pargana* is considered as an example of a taluka in the 18th-century Maratha empire, based on primary documents mostly from the *Nagar Jamav Daftar*. Even if only a small part of the Peshwa dynasty's state, it allows us a glimpse of wages and modalities of their payment between roughly 1750 and 1800.

NOTES

1. Gordon (1993, p. 154).
2. This is, however, left out of this chapter, where we will deal only with the *phadnis* or *majumdars* (see Section 5.2.1) and soldiers (see Section 5.2.2) who worked under a *saranjamdar* (a person who gets a *saranjam* or grant of land for maintenance of troops), who were partly paid by government, and partly by the *saranjamdar* by whom they were employed.
3. *Parganas* were introduced by the Delhi Sultanate and word is of Persian origin. As a revenue unit, a *pargana* consists of several *maujes* or villages which were the smallest revenue units, consisting of one or more villages.
4. Vad and Marathe (1907, p. 345).
5. The script was in use till 1950, at which time the chief minister of Bombay, B. G. Kher, officially discarded it.
6. Nagar Jamav Daftar papers were collected by British administrators from various *parganas*, *mahals* and villages from Ahmednagar district officials and village accountants for purposes of alienation. During British period, Sinnar was included in Ahmednagar district. While Sannika Daftar have papers selected by researchers for references grouped in Sannika Daftar.
7. Tamaskar (1978, p. 356). Malik Ambar (1548–1626) was originally from Ethiopia. Malik became a popular prime minister of the Ahmednagar Sultanate, showing administrative acumen. He is also regarded as a pioneer in guerrilla warfare in the region.
8. Maharashtra Rajya Gazetteer (2013, p. 17).
9. Campbell (1883, p. 268).
10. Chapekar (1937, p. 5). In 1757, Anandrao Ram adopted Ramrao Anant, the son of Balaji Aapdev Soman from Sinnar. Anandrao Ram's forefather was Ramaji Mahadev.
11. Pawar (1993, p. 458).
12. Pune Archives, Nagar Jamav Daftar, 2168. In a *dastak patra* (passport) of 1783 thirty bulls were mentioned, purchased by a *khasgat* (private person) for agriculture purposes. In 1783, ₹101:3 were spent for the construction of a well.
13. According to *papers relating to the second revision settlements of the Igatpuri Dindori, Nasik, Niphad, Sinnar, Chandor, Yeola and Nandgaon talukas of the Nasik district with reports on Inam villages* (Vol. II, Government Central Press, 1916).
14. Under the Peshwas for accounting the Suhur Sun or the Arbi year was mainly followed (not the Hindu calendar). I have converted this to the current era.

15. Our own calculations in italics.
16. Although appointed in every *mahal*, the salaries of *majumdars* and *phadnis* could vary, probably according to the revenues per mahal. In 1774, for example, the *phadnis* of Deopur was paid ₹400; in 1777, Janardan Govind *phadnis* of Maval was paid ₹250, while in the same year Antaji Yashvant *phadnis* at Sinnar got ₹300, Abaji Anant *phadnis* of Van-Dindori mahal ₹250, and Ramchandra Aaimole *phadnis* of Baranpur ₹300. See Sannika Daftar, Pudke 12/7/6927.
Comparative study shows if income of *mahal* was more in the form of revenue reflected the wages of the officials.
17. Pune Archives, Nagar Jamav Daftar.
18. Pune Archives, Nagar Jamav Daftar, 2169.
19. Pune Archives, Nagar Jamav Daftar, 2168.
20. Pune Archives, Nagar Jamav Daftar, 2169.
21. The kamavisdar was in charge of revenue collection at pargana level. As Sinnar had 14 villages under its jurisdiction, the revenue from these villages was collected by the havildar, the subordinate of the *kamavisdar*.
22. Pune Archives, Nagar Jamav Daftar.
23. Pune Archives, Nagar Jamav Daftar. As per the document, Mhalsakore, Harsule Gulvanch and Hivargao were under Yadavrao Pawar. In 1795, he used to get ₹600 Mokasa or the state share in the revenue from these villages. From the total income, that is, in the form of revenue and taxes, Maratha used to get one-fourth income which was also called as *chauthai* as per the contract with Mughal emperor for six *Subhas*, remaining $\frac{3}{4}$ was called as *mokasa*. I could not find Pimpri, Nimbgaon information. But between Pimpri and Nimbgaon, Sonambe and Konambe, there was one octroi collection centre. I have a chart which shows Konambe and Sonambe were *dumale*, means an alienated village.
24. Pune Archives, Nagar Jamav Daftar, Sawai Madhavrao Peshwa, p. 34.
25. Pune Archives, Nagar Jamav Daftar, Bajirao II, p. 133.
26. Pune Archives, Nagar Jamav Daftar, Balaji Bajirao, p. 176.
27. Pune Archives, Nagar Jamav Daftar.
28. Pune Archives, Nagar Jamav Daftar, 2168. This was paid from *karsai* tax receipts, received from Sinnar.
29. Pune Archives, Nagar Jamav Daftar, 6102.
30. Pune Archives, Nagar Jamav Daftar.
31. Vad (1911, p. 63).

32. Pune Archives, Nagar Jamav Daftar, 2167.
33. Pune Archives, Nagar Jamav Daftar.
34. Pune Archives, Nagar Jamav Daftar, 2168.
35. Pune Archives, Nagar Jamav Daftar, 2167.
36. Pune Archives, Nagar Jamav Daftar, 2168.
37. Some other information, which is not related to Sinnar, but which gives some indication of the range of occupations and wages, is available from Nasik. Laxman Appaji was entrusted with the work of opening mint at Nasik. He was allowed an establishment of total three employees of ₹20 for one *karkun* and 2 peons or *pyade* on ₹6 and the payment was executed by one-and-half-monthly *rojmaras*. Besides these employees, 10 workmen such as 1 blacksmith, 5 goldsmith, 2 hammers and engravers were also appointed. The profit on every ₹1,000 coined was ₹45 (Vad & Marathe, 1907, p. 299).
38. Pune Archives, Nagar Jamav Daftar.
39. Pune Archives, Nagar Jamav Daftar, 2167.
40. Vad and Marathe (1907, p. 58).
41. Pune Archives, Nagar Jamav Daftar, 2167.
42. Vad (1911, p. 59).
43. Vad (1911).
44. Vad (1908, p. 207).
45. Pune Archives, Nagar Jamav Daftar, 2168.
46. Pune Archives, Nagar Jamav Daftar.
47. Pune Archives, Nagar Jamav Daftar, 2167.
48. Sarkar (1948, p. 84).
49. In Etheridge's report, Sinnar *pargana* is found in Gangthadi *prant* in Ahmednagar collectorate. While Pune *prant* is categorized in a different section. In 1772, in Sinnar, for ₹1, 8 *ser* rice was available, and in Pune *prant* for ₹1, 17 *ser* (as per the report). In 1789–1790, in Sinnar, price of rice was ₹1 for 6 *ser* (according to Jamav Daftar paper) while in Pune as per report it was 18 *ser*. This means that rice was costlier in Sinnar. In Nagar Jamav Daftar, 2167, I found one separate section with the heading *Bhadetandul*, means rice exported to Peshwa in Pune by officer in charge, the *Kamavisdar* of Sinnar, who was appointed by the central government. In 1759, rice costing ₹89 was exported to Pune. In this export, every village of Sinnar contributed in the following way: Pimpri ₹12, Paste ₹4, Gulvanch ₹8, Nimbgaon ₹9, Deshwandi ₹5, Konambe ₹4, Hivargaon ₹8, Jambgaon ₹5, Malegaon ₹5, Manegaon ₹9, Harsule ₹3, Mhalsakore ₹8, Vadgaon ₹9. The reason for costlier rice might be the result of famine which occurred in Sinnar in 1772 and also around 1790.

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WAGE LABOUR AND OTHER FORMS OF REMUNERATION IN THE DECCAN IN THE 1820S

Jan Lucassen

Studies on wage levels are indispensable for understanding present and past societies. The relevance of such data, however, often goes unquestioned: which part of the population actually receives wages, and what proportion of the household income do they account for? Of course, following economic theory, this question is not essential if wage data are to be used as an indicator of welfare levels. After all, it is surmised that in an open and transparent labour market, people can move at will between self-employment and wage labour (the predominant labour relations [LR] in most societies of the last centuries) commensurate with levels of remuneration. Whether this precondition is fulfilled remains an open question, certainly with respect to earlier periods in general and for India, with its religious, caste and ethnic divisions in particular (Drèze & Sen, 2013, especially Chapter 8).

In recent centuries, the majority of the working population in most societies was employed in agriculture and industry, and consisted primarily of small peasant farmers and urban craftsmen, and second of wage earners. In a free market society, the impact of wage payments on the population as a whole depends on company size.

The larger the company, the more likely it is to need wage workers. Historical data on the proportion of self-employed (predominantly peasants and artisans in the past) and wage earners mainly stem from occupational, industrial and agricultural censuses. The first all-India census to provide occupational data was held in 1881, with a new one subsequently conducted every decade. A preliminary interpretation of the 1901 occupational census by Rombert Stapel (Lucassen & Stapel, 2014) showed that about 30 per cent of the total population at this time was self-employed compared to 11 per cent who could be considered wage earners (the other main categories: 32% not working, mainly children; 20% engaged in household work).¹ Because of the many interpretation problems inherent to these early Indian occupational censuses, it has been proposed to combine, especially at the regional level, the outcomes of 1881 with those of the subsequent censuses of 1901, 1911 and 1921 (omitting the 1891 census due to its deviant categorization), thus providing an impression of occupations at the beginning of the 20th century.²

For earlier periods, only a handful of regional censuses have been taken and published, some recording occupations, some not; and, except for one, none have been properly analysed. That exception is the statistical description of Mysore in 1800–1801 after the subjugation of Tipu Sultan, made by Dr Francis Buchanan (Hamilton) (1762–1829), studied by Sivramkrishna (2009), to which I will refer several times in what follows.³ In this chapter, I will concentrate on another early set of statistical data, that is, on the Deccan just after the British subjugation of the Marathas in the early 1820s.

This wealth of information for such an early period is unique for India and for that reason alone it deserves our attention. Furthermore, this choice has been inspired by several contributions in this volume on wages in this very region in the 18th and 19th centuries. Engaging in a systematic discussion of the statistical information collected by Henry Sykes, I attempt to reconstruct the extension and impact of wage payments in the Deccan.⁴ The formal taxonomy used is that developed by the collab on global LR as developed at the International Institute of Social History in Amsterdam (Hofmeester et al., 2015).

I adopt a stepwise approach. After a word about the sources (Section 6.1) and a brief introduction to the region, including its

basic demographics (Section 6.2), the division between the working and non-working population (mainly children) is established (Section 6.3). The next step is the distinction between urban and rural populations because, to a great extent, population density is determined by occupational structure (Section 6.4). These introductory skirmishes are followed by the main parts of this chapter, namely occupations and LR in the towns (Section 6.5) and in the countryside (Section 6.6). Finally, the importance of waged work and the wage level itself are established (Section 7) before conclusions are drawn.

6.1. SOURCES

As a consequence of the third Anglo-Maratha War, the Peshwa of Poona had to surrender the Deccan to the British in 1818 who made it part of the Bombay Presidency of the East India Company (Kulkarni, 2006, Chapter 5).⁵ The newly won territory was situated in western India, roughly between Bombay and Goa, separated from the Konkan, a 50–80 km wide coastal strip along the Indian Ocean, by the Western Ghats. It roughly coincides with most of modern Maharashtra and the north of modern Karnataka and consists of a plateau some 600–900 m above sea level, tilting from west to east.

As part of their attempts to establish civil authority over the Deccan, the British, under Mountstuart Elphinstone (1778–1859; British resident at Poona 1810–1819 and subsequently governor of Bombay 1819–1829) and his successor, W. Chaplin, began a thorough investigation of the existing situation. This included commissioning William Henry Sykes to report on the nature of the region in the widest sense of the word or, at least, that is how he perceived his task.

William Henry Sykes (1790–1872) was born near Bradford in Yorkshire and joined the Bombay Army in 1804. While in military service, he taught himself ‘writing and speaking the Maratha language’, as he proudly mentions in the introduction to his first report on the Deccan of May 1826.⁶ Apparently not long after the conquest of the Deccan, Sykes was appointed Officiating Statistical Reporter to Government at Bombay. This enabled him to investigate intensively all sorts of written and oral information on the country, as attested by his extensive reports, still available

in manuscript and print. Apart from being a prolific ornithologist, he maintained a lifelong interest in economic and political statistics. Following his return to Britain in 1837, he became MP for Aberdeen in 1857, was elected president of the Royal Asiatic Society in 1858 and acted as president of the Royal Statistical Society from 1863 until 1865.

Sykes spent ample time (at least 16 months)⁷ travelling through the Deccan, which, according to his calculations, at that time counted no less than ‘3,285,985 inhabitants, spread over 48,987 square miles, and averaging 67 inhabitants to the square mile’.⁸ He reports his conversations with informants in detail and compares oral and written testimonies in order to gather the most reliable information. He also does not hesitate to consult the archives of the late Peshwa, resulting in a comparison of wage levels in 1814 and 1828.⁹ His statistical population data also rely on written sources in Marathi: he explicitly states that the 1822 census of the city of Pune is in this language (the 1828 census of the city of Ahmednagar, however, was conducted by the civil surgeon Dr Walker¹⁰ and must, therefore, have been in English). More importantly, the village data he received from collectorates are based on local written sources, specifically, village accounts, which:

are kept on a ribbon of paper, about five inches wide and some yards long, not rolled up but folded in lengths of twelve inches or more: one of these is required for each year [...] At the head of the paper called Gao Jarha is the name of the village, the Pergunnah and Soobeh it is in, the year and the name of the government it is under; this is followed by the Tunkha or Moghul money assignment upon the village, [...] then follows the total quantity of land belonging to the village, deductions are made [...] the remainder is distinguished into garden and field-land; then follows a roll of the cultivators, with a number of columns to record the quantity of land held upon each tenure, and the amount payable for each; a column for the share of the extra assessments, previously noticed, including the share of the village expenses, which is always extensive; also columns for totals of the different heads. Then follow rolls of the Bullooteh, shopkeepers, trades, and other subjects to fixed taxes, with columns for the proportion of tax upon the particular trade; the Bullooteh, the house tax, and share of

extra assessments, which these people pay although they are not land holders [...].¹¹

It is too early to speak definitively about the reliability of Sykes' statistical work, but he certainly has done his best to be as detailed as possible, given the state of statistics at the time.¹² He is also prepared to correct himself, as is apparent from the following description of the Turruff Aleh in Poona Collectorate.

there is an air of tolerable well doing in the people, if not of prosperity, which I have observed to characterize a great number of the towns in Dukhun, remaining under native authorities, a prosperity which is the more unaccountable if we admit the truth of the common opinion, that the farmers under native governments are subject to great exactions.¹³

Moreover, it should not be forgotten that all three of his manuscripts discussed here are richly illustrated with coloured drawings, carefully executed by himself.

To date, only a small part of Sykes' work seems to have been used in social and economic history. R. D. Choksey, who devoted his life to source-based research on the Deccan during the first half of the 19th century, appears to use only Sykes' published works and only in passing.¹⁴ Sumit Guha's (1985, p. 201, 203, 211) mentions of Sykes are limited to his papers in the Natural History Museum (not those in the British Library) and of his articles, the published Land Tenures' Report (1830 or 1835, and 1866) and the extensive 1838 article. He has certainly not made extensive use of all available materials.¹⁵ Although my conclusion is based on a small selection of scholarly work on the Deccan, it is clear that Sykes' results have thus far been underused.

In order to present the original materials that have been preserved, it is useful to compare four texts. Report 2 of 1829, being the most extensive, is used as a yardstick for the others (see Appendix 6.1).

The best way to proceed with a possible reconstruction of Sykes' reports on the Deccan seems to be to starting with the long 1838 article. This analysis will be enriched and extended by Report 2 and, subsequently, by Report 1 (both in the British Library) and,

finally, by the manuscript in the Natural History Museum. After reconstructing the original text, other articles and publications by Sykes on the Deccan are considered (see References).

For topics where Sykes does not provide enough information, some other sources are available for the Deccan in the first quarter of the 19th century (especially Steele, 1827, and Green, 1852). But extrapolations from similar reports on adjacent regions are also necessary, namely Portuguese Goa in 1835, the Sawunt Waree State 1818–1851 and Mysore (de Matos & Lucassen, 2020; Sivramkrishna, 2009). Of course, archival research in regional and local archives, especially in Pune, is required to make more definitive statements; nevertheless, the method followed here provides a viable overview of LR in the Deccan in the early 19th century.

6.2. THE POPULATION OF THE DECCAN

In the early modern period, the Deccan was part of the Mughal empire and, from the end of the 17th century, it was ruled by the Peshwa of Poona, who also resided in the city that today is known as Pune. After the British conquest in 1818, the Deccan became part of the Bombay Presidency. Administrative divisions changed regularly under the British rule (see Table 6.1).

Table 6.1 Administrative Divisions of the Deccan, c. 1820, 1874, and Now

Collectorates c. 1820	Districts 1874	Geographically	Actual States
Poona	Poona	Centre-west	Maharashtra and the north of Karnataka
[Solapur sub-collectorate of Poona]	Solapur		
[part of Ahmednagar]	Nasik	Centre-east	
Ahmednagar	Ahmednagar		
Candeish/Khandesh	Khandesh	North	
Dharwar	?	South	
Rajah of Satara	Satara	Centre-southwest	
Southern Maratha Jagirdars under British protection ¹⁶	?	South	

Source: 1820: IOR/Eur. Mss. D 148; 1874; Choksey (1955, p. 28).

Adding population figures for the different collectorates and for some other regions, Sykes arrives at a total of nearly 3.3 million inhabitants for the Deccan in 1822. His counting method seems to be very accurate, and he is entirely transparent about his estimates. About three quarters of his data are based on actual counts. Where these were missing, he made estimates based on the number of villages and houses multiplied by the average number of occupants per house in the surveyed regions. Crucially, for the latter, he provides detailed information per district on broad categories such as Brahmins, Rajputs, Shudras and low caste, occupational titles, and the numbers of ploughs, cattle, etc., with respect to cultivators (this information is available for 2,067,998 inhabitants or 63% of the population; hereafter indicated as 'Selection'; see Table 6.2).¹⁷

A wider historical perspective suggests that these population figures from the 1820s must have been at a very low point. Sykes (1838, p. 270) reports on many occasions that population figures had dropped dramatically due to the Maratha wars that had just finished in 1819, and even that many villages, particularly in the north, had been deserted. He reports 1,279 uninhabited villages in the four collectorates. This amounts to 12 per cent of the total of 10,814. The capital Pune would have lost half of its inhabitants.¹⁸

Subsequently, we see a recovery. Heavily depopulated Khandesh, for example, grew from 478,457 inhabitants in 1827 to 785,091 in 1851, an increase of 64 per cent within 25 years. That may not have been an average for the entire Deccan, because, according to the first census, the Deccan counted 5,223,237 inhabitants, signalling a growth of 60 per cent within half a century (Choksey, 1955, p. 28; Green, 1852, p. 42). We will not go into the economic history of the Deccan in the post-Sykes period here (Choksey, 1955, pp. 28–29). As for the natural growth potential in the short term, Sykes reports (I assume for 1828) a birth rate of 'not quite 2 per cent' in the Poona Collectorate, against an alarmingly higher death rate of 2.67 per cent, due to 'spasmodic cholera'.¹⁹

In the 1820s, the Deccan was a region with, in addition to a small number of towns (see below), numerous villages, each with, on average, 60–70 houses. Consequently, we will be analysing the LR of a mainly rural society. That is not easy as Sykes does not provide the information needed, such as the number of wage workers,

Table 6.2 Population, Deccan, 1822

	1822				Selection for Which Extensive Information is Available per Pargana	
	Inhabitants	To the Square Mile	To a village	To a House	Inhabitants	Heads of Household
Poona	550,313	66.45	247.36*	4.79	331,015	69,105
Ahmednagar	666,376	67.24	263.47**	4.89	625,000	127,811
Candeish/Khandesh	478,457	38.19	178.39	3.96	371,404	93,788
Dharwar	838,759	91.94	336.7	4.48	740,579	165,308
Subtotal	2,533,905				2,067,998	456,012
Rajah of Satara	488,846	79.25	287.05	?		
Southern Maratha Jagirdars under British protection	263,236	88.39	287.05	?		
Total***	3,285,987	67.07	270.34			

Source: Sykes (1838, pp. 267–270); IOR/Eur. Mss. D 148, pp. 76–80 (p. 42: The data on the city of Poona are derived from 'the Mahratta List of the City of Poona, ascertained in 1822' [a lengthened document] and inspected at the collectorate; those for Ahmednagar are derived from a census conducted by Dr Watson in October in 1828).

Note: *Exclusive of the city of Poona, **exclusive of the city of Ahmednagar, ***exclusive of 'the army, camp followers, Bhils or the wandering tribes' (p. 270).

employers or independent producers, directly. This necessitates going through his otherwise rich information step by step in order to use it for our goal, the reconstruction of LR in the 1820s.

To begin with, Sykes (1838, p. 264) provides a rough stratification by distinguishing a few major 'constituents of the population'.²⁰ His published report provides us with results per collectorate, while in his manuscript they are available per *pargana*²¹ (see Table 6.3).

This categorization is by no means self-evident, and Sykes provides the following background information for several groups, which is worthwhile rendering in detail here.²²

- The **Brahmans** are best represented in Poona Collectorate because this was the centre of the Maratha state. Elsewhere, he says that all Kulkarnis (accountants and village clerks) belong to this group, as do Deshpandes or writers, accountants and district registrars, as well as a number of the Patels or headmen of towns and villages.²³ According to Sykes, this latter group is particularly to blame for the existing social inequality and concomitant poverty; witnesses his comments on the northern parts of Poona Collectorate²⁴:

There is a somewhat smaller proportion of Bruhmuns in this Turruff [of Narraingaon] amounting to little more than 10 per cent, instead of 11.5 per cent, the average of the whole of the Poona Collectorate; & in running over the different Turruffs, one is almost tempted to say, that the prosperity of each is in the ratio of the diminution of the numbers of these privileged persons. The most permanently of these wretched of the whole of the Purgunnahs of the Poona Collectorate is that of Indapoor & in it every fifth inhabitant is a Bruhmun, & yet this year in this Purgunnah the villages & hamlets average 27 cultivators, who nominally pay a land rent of 22.75 Rs. for which there are constant calls for remissions, while in the rest of the Poona Collectorate the villages and hamlets average 25 cultivators only who pay 28.5 Rs each land rent. At the receipt of the Population Returns in 1826 Indapoor had only 62 villages inhabited out of 85 & they averaged only 123 inhabitants each.

- **Rajputs** are unimportant and he adds: 'I should doubt whether or not the 3 1/2 per cent of Rajpoots in the returns from Khandesh, should be added to the Mahratta population.'

Table 6.3 Class/Status Distribution (Percentages of Total Population), Decan, the 1820s

Collectorates	Shudras and Collectorate Maratha Cultivators and Collectorate				Ati Shudras or Low Castes	Musalmans
	Brahmans	Rajputs				
Poona	11.6%	0.4		73.8	9.8	4.4
Ahmednagar*	[c. 11]	[c. 1]		[c. 74]	[c. 9]	[c. 5]
Khandesh	5.4	3.5		69.6	14.7**	6.8
Dharwar	4.5	0.6		74.5	11.9	8.5
Total	N.A.	N.A.		72.65%	N.A.	1/15 [6.67%]

Source: Sykes (1838, p. 264); IOR/Eur. Mss. D 148, 64–65.

Note: 'The constituents of [this] Collectorate do not differ in their proportions from those of the Poonah Collectorate'. **mainly Bhils.

- **Musalman**s are also a small group, though they are well represented, accounting for 29 per cent of the city of Ahmednagar in 1828 (but not visible in Table 6.3). This is due to the fact that this city had been the capital of the Ahmed Shahee empire. Regarding their occupations, Sykes says that ‘they prefer the service of the sword, particularly in the irregular troops. Some persons cultivate, but the greater part are manufacturers.’²⁵

The proportion of **low casts**, men who are only engaged in vile or discreditable offices by the natives, although otherwise employed by the British [...] all that part of the **Hindoo** population which cannot claim to be **Shoodruhs**, such as **Mahrs**, **Dhers**, **Maangs**, **shoemakers**, **skinnners**; **Ramoosees**, **Beruds** and **Bheels**. The Mahrs and Dhers are the scavengers, the Maangs executioners; shoemakers and skinnners speak for themselves. The Ramoosees and Beruds are *born* thieves, or are thieves by cast, and they are usually employed for the protection of villages.²⁶

- Elsewhere, he explains that some of these low-caste inhabitants of the Deccan are also able to rent a plot of land and that there are ‘many families of them in every village’.

A very important tenure in villages is that of the low-cast people, called Mahr by the Mahrattas, and Dher by the Moosulmans. They have land in Eenam lands in all villages, divided into Hurkee and Arowlah; the former is rent free, and generally bears a small proportion to the latter, which pays a low quit rent.

In return, they must perform all kinds of public duties for the village and the government. However, ‘{a}s low casts do not cultivate their Eenam lands, they derive less advantage from them than other Eenamdars, but make the best terms they can with the *Koonbees* to cultivate their lands for them.’ In addition, some of the Mahrs also perform the function of one of the 12 *Bara Ballooteh*, for which they receive fees in kind from all of the villagers.²⁷

- The **Shudras** are **Maratha cultivators** (Marathas proper)²⁸ and comprise around three quarters of the total population.

With respect to religion, apart from the 85 per cent Hindus and 15 per cent Muslims, and the variations among them, there are only very small minorities of other religions, such as Christians and Jain. The latter are mainly shopkeepers in Pune with their own local temple. The exception is Mahreh, in the south, where there are 28 families of weavers and cloth sellers, and the surrounding countryside, where the entire population of the village of Ruheemutpoor (Talook Mohol) consists of Jain cultivators and weavers.²⁹

While all this information is highly interesting, it does not inform us directly about the prevailing LR; that said, many relevant aspects will return in what follows. Before discussing these, however, we must pay due attention to the inhabitants who do not feature Sykes' figures, as well as to some demographic basics, in particular the sex ratios.

Sykes (1838, p. 270) describes at length his method for reconstructing the 1822 population. He is aware that his snapshot is incomplete, however, because the army, its camp followers, as well as the *Bhils* or 'wandering tribes' are missing. And although he does not mention them systematically, we also are missing slaves. This is not to say that there were no slaves in the Deccan at that time, as their presence in nearby Goa³⁰ and also in other parts of Southern India have been extensively documented (Shirgaonkar, 2010, pp. 98–112; Walker, 2004, p. 68). If the situation in the Deccan reflected this pattern, then we may suppose that no more than 1 per cent of the total population should be classified as unfree labour. In particular, female domestic slaves were not uncommon in the cities (Fukuzawa, 1991, pp. 116–127).³¹

On the military, not enumerated in his tables, Sykes (1838, pp. 323–333) is brief.

The army consists of some of the royal troops paid by the East India Company; of European regiments of artillery and infantry belonging to the Company, and of native regiments of cavalry, infantry, and pioneers, armed, clothed and disciplined in the same manner as the European troops. The army is separated into divisions commanded by the General Officers and Brigadiers-General, and the divisions are divided into brigades.³²

His assertion that these are professional soldiers who are paid a wage is an important one. We know from another source, for example, that 17,734 soldiers were present around 1820, of whom 11,126 were in the Poona Division, 2,608 were in Khandesh and 4,000 were in South Maratha Country.³³ I return to the military as wage earners in my conclusion.

The *Bhils*³⁴ (supposed to be the aborigines of the countries where they are found), too, do not generally feature in Sykes' demographic overviews, though he sometimes makes an exception. Regarding the 14.72 per cent 'Ati Shudras or low-caste' inhabitants of Khandesh (see Table 6.3), he says that they are mainly *Bhils* and that, in that collectorate, they inhabit 'large tracts of the country'. In contrast, 'within my limits' (i.e., the collectorate of Pune), the *Bhils* are much less numerous than is usually supposed to be the case. There, they can be found mainly on the banks of the Mool [Mula] River. Taken together, this scarce information possibly implies, albeit roughly, at least some 50,000 *Bhils*, or up to 2 per cent of the total population (1% of the working population). The majority appear to have lived as hunter-gatherers.

in the social scale these poor creatures are even below the Mahr and Maang, in short the outcasts of outcasts. Those I have seen were bare headed, almost naked, sodden half savage, small and emaciated. Their only arms were a bamboo bow, between 5 and 6 foot long and reed arrows with iron points. They spoke the Mahratta language, but so much modified as to be intelligible to me with difficulty.

Some of them, however, have taken on a policing role, including two of Sykes' informants, Bhil naiks called Mahtarjee and Syajee, who had '[...] Moosulman and Mahratta Seypoys in their employ to enable them to fulfill their engagements to the government to protect certain districts'. According to the LR taxonomy followed here, these primarily hunter-gatherers must be classified as 'reciprocal labour' (label 4).

Leaving aside for a moment the uncounted slaves, military and *Bhils*, we now turn to the sex ratios, as gender determines to a great extent one's LR, in particular for women who take the brunt of household chores. On several occasions, Sykes stresses the fact that

Table 6.4 Sex Ratios (Males to Females), Deccan, the 1820s

Collectorates	Men to Women	Cities and Towns*	Men to Women
Poona Collectorate	100 to 88	Poona	100 to 94
Ahmednagar do.	100 to 86	Ahmednagar	100 to 92
Khandesh do.	100 to 85	Junnar	100 to 89
Dharwar do.	100 to 89	Dharwar	100 to 98
		Belgaon	100 to 91
		Bagalkot	100 to 101.25
		Gunnesh Pait	100 to 101.14
Deccan Total	100 to 87.36		

Source: Sykes (1838, p. 263).

Note: *Such data are available for more towns; see Table 6.5 below and for a number of places under 5,000 inhabitants, see Sykes (1838, p. 254).

there are many more men than women (see Table 6.4), in particular in relation to the age groups for young children. He contrasts this situation not only in Europe but also in Java.³⁵

Examining this very unbalanced sex ratio, there seems to be no great difference between the different castes.³⁶ The only rule—apart from a more balanced picture in the towns than in the countryside—appears to be the gradual increase in differences as children grow older, and a subsequent decrease among adults (see Table 6.5). It was reported, for example, that in 32 turruffs of Poona Collectorate, in 1826, 100 boys were born against 94.27 girls.³⁷ Apparently, mortality rates among adult men were much higher than among women. These figures (and those in Tables 6.5 and 6.6 below) suggest, especially for the countryside, the presence of either infanticide or neglect of young girls.

6.3. THE WORKING AND NON-WORKING POPULATION

The division between the working and the non-working population (mainly children) may be derived from data on age divisions, as no direct information on this topic is available.

Table 6.5 Sex Ratios (Males to Females) by Age Group, Deccan, the 1820s

	<i>At Birth</i>	<i>At Young Age (Boys/ Girls)</i>	<i>Adults (Men/ Women)</i>	<i>Total Population</i>
Poona Collectorate 1826	100 to 94.27			100 to 88
Ahmednagar Collectorate 1822		100 to 62.16	100 to 102.18	100 to 86
Khandesh Collectorate				100 to 85
Dharwar Collectorate				100 to 89
Ahmednagar city 1826		100 to 67.62	100 to 106.06	100 to 92.46
Poona city 1822		100 to 73.26	100 to 103.40	100 to 94
Junnar city				100 to 89
Dharwar city				100 to 98
Belgaon city				100 to 91
Bagalkot city				100 to 101.25
Gunness Pait city				100 to 100.14
Deccan total				100 to 87.36

Source: Sykes (1838, pp. 261–263); IOR/Eur. Mss. D 148, 59.

In order to determine the age at which people start working, we must have an idea of the age distribution by gender. Unfortunately, such figures are only available in Sykes' papers for Ahmednagar city and Collectorate 1822, and in a publication by Alexander Mackintosh about parts of Poona Collectorate. These include the division between men and boys, and between women and girls. Unfortunately, they do not tell us the age at which girls become wives and boys become men.

The conspicuous underrepresentation of girls as compared to boys cannot be attributed to normal demographic causes, as the

Table 6.6 Crude Age Divisions, Deccan (Selection), the 1820s

		Men		Women		Total
		Boys	Men	Girls	Women	
Ahmednagar city 1822	Absolute	3,350	5,953	2,559	5,976	17,838
	Percentage	18	34	14	34	100
Ahmednagar Collectorate 1822	Absolute	96,447	146,750	59,956	149,945	453,098
	Percentage	21	33	13	33	100
Pabull district north of Poona	Absolute	7,474	10,747	4,182	11,547	33,950
	Percentage	22	32	12	34	100

Source: Sykes (1838, p. 262, Ahmednagar); Mackintosh (1833, p. 7).

Note: These figures almost coincide with Sykes' totals for the five turruffs of Warreh, Ghoreh, Ambegaon, Pabal and Oswuree presented in his Poona table in IOR/Eur. Mss. D 148, 76–80: resp. 18,629 men and 15,965 women, total 34,594.

more precise age division for neighbouring Sawunt Waree State demonstrates (Table 6.7). Therefore, the widely divergent figures for boys and girls in the Ahmednagar and Pune collectorates must be due to differences in defining the age at which boys become men and girls become women.

Alexander Mackintosh (1833, p. 7) explicitly mentions 16 years as the age at which boys become 'grown-up men'. Consequently, the census takers must have taken a substantially earlier age at which girls became women. Indeed, we may suppose it is 11 years, the age at which, as a rule, girls were married. The practice of early and universal marriage in the Deccan leads H. Green (1852, p. 58) to the following strong statement: 'half the consummations of marriages in this country are, almost literally, rapes committed on mere children.'³⁸

If we suppose that, together, boys and girls, that is, the under the age of 11, were comprised of, maximally, one-third of the total population of the Deccan in 1822, the question is to what extent they may be considered part of the working population. It is highly likely that the older ones among them were in work, since the

Table 6.7 Age Division of Sawunt Waree State, 1851

	Men		Women		Total	
	Absolute	Percentage	Absolute	Percentage	Absolute	Percentage
0-10	23,582	31	21,134	29	44,716	30
11-20	15,358	20	13,407	19	28,765	19
21-30	13,330	17	13,003	18	26,333	18
31-40	10,171	13	9,682	13	19,853	13
41-50	7,291	10	7,214	10	14,505	10
51-60	4,233	6	4,927	7	9,160	6
61-70	1,926	2	2,425	3	4,351	3
71-80	729	1	959	1	1,688	1
81-90	230	0	251	0	481	0
91-100	106	0	107	0	213	0
Total	76,956	100	73,109	100	150,065	100

Source: Anderson ([1855]1995, 51ff).³⁹

majority certainly was not attending school. Sykes provides a few indirect clues regarding child labour in his discussion of literacy rates and schooling.⁴⁰

the general illiterateness of the cultivators is remarkable [...] I believe not one cultivator in a hundred would be found able to write, or count up to hundred but by fives; and my daily unreserved intercourse for hours with numbers of this class of persons has given me facilities to for forming this opinion.

This is not, he writes, due to a lack of intelligence, but rather to a lack of schools and the need to start working at an early age. According to Sykes, responsibility for this situation lies with the Brahmins, who were ‘repressing all participation [of the Shudras] in their usurped dominion of letters’.⁴¹ The Peshwas emphatically stimulated scholarship among Brahmins, also materially, a practice continued by the British (Shirgaonkar, 2010, pp. 90–92).⁴²

In terms of formal teaching, the data reveal only a few schools (see Table 6.8). The extreme difference between Khandesh, on the one hand, and Dharwar, on the other, might have less to do with the representation of Brahmins and more to do with the income structure of these collectorates: in Dharwar, only 5 per cent of household heads are Brahmins, compared to 9 per cent in Khandesh, where small cultivators dominate much more than they do in southern Dharwar.

More importantly, these schools do not have many pupils. In Sawunt Waree State—the only part of the Deccan for which

Table 6.8 Schools per Inhabitants, Deccan (Selection), the 1820s

	<i>Schools per Inhabitants</i>
Dharwar collectorate (only 5% Brahmin households)	1 to 2,452
Khandesh collectorate (9% Brahmin households, but much smaller farms)	1 to 4,369
Poona collectorate without the city population	1 to 3,337
Sawunt Waree State (1852–1853) ⁴³	1 to 3,106

Source: Sykes (1838, p. 272); IOR/Eur. Mss. D 148, 76–80; Courtney and Auld ([1855] 1995, pp. 39–40).

Table 6.9 Social and Gender Division of Children under 11, Sawunt Waree State, 1852

	<i>Males 0–10</i>	<i>Females 0–10</i>
Brahmins	1,752	1,542
Hindus of other casts	20,875	18,748
Muslims	606	520
Others	375	324
Total	23,608	21,134

Source: Anderson ([1855]1955, pp. 148–149).

reasonably early scholarization data are available—there are only 817 pupils in the 49 schools, or under 17 children per school. We may be certain that many of the pupils would have been Brahmin boys as the data suggest that there were 1,752 of them in the state in the age bracket 1–10 (see Table 6.9).

If half of these Brahmin boys, say the group aged from 5 to 10, actually attended school, there would have been no place for other boys, let alone girls. But not even all Brahmin boys were that lucky, because other occupational groups that depended on literacy skills also sent their boys to school. Indeed, according to Sykes (1838, p. 272), generally, all male children of ‘Brahmans and of the shopkeepers, Shaitees (Heads of trade), and Mahajuns (Bankers) [...] The Koolkurnees, or accountants and village-clerks’ attend school. Moreover, ‘[t]he shopkeepers being generally people from Goojrat, keep their accounts in the Goojratee language. The character in universal use for Business is the Mohr in the districts.’

The main reason why the children of the agricultural workers did not attend school is ‘the imperious calls upon them for the services of their children in agriculture, and in attending their cattle’. Where irrigation is important ‘it requires also a boy in the garden or field to open and shut the different channels’.

Finally, we turn to the question of at what age the inhabitants of the Deccan could afford to stop working. Sykes (1838, p. 342) is not very optimistic about the ‘[d]uration of human vigour: The men from the ages of 20 to 45 years, and the women from 15 to 40,

enjoy all their physical power, except in the case of artisans and agriculturalists, whose troubles commence early'. This is not to say, of course, that they were doing nothing. By far, the majority of the meagre 10 per cent of the population over 50 would have been active in the home and working the household plot until the very end, as is the case in contemporaneous Europe, by the way.⁴⁴

Taking all this information together, we may conclude that a flat 30 per cent of the total population may be considered as being 'not working' according to the taxonomy adopted in this chapter (labrel 1). Qualifications may be possible with respect to gender (more boys than girls), town or countryside (more in towns) and caste/class (more Brahmins and administrative occupations), but the evidence is not strong enough to permit us to convert this into firm percentages.

6.4. THE URBAN AND RURAL POPULATIONS

The next step in our reconstruction is to distinguish between the urban and the rural populations of the Deccan because population density determines to a great extent the occupational structure. Although Sykes provides ample information on the number of inhabitants of different towns, it is difficult to achieve an all-encompassing overview. I will therefore refer to later population figures in order to interpret the situation around 1820.

Sykes (1838, p. 253) distinguishes between *sheher* (city), *kasba* (market town), *mauje* or *gaon* (village) and *waree* (hamlet). Moreover, the cities and towns may comprise several villages, as well as their suburbs, called *pait*.⁴⁵ Throughout his text, he refers to Poona, Ahmednagar and Junnar as cities and we have population figures for all three (Table 6.10). Otherwise, he calls many places a town. However, the numbers of inhabitants available for Poona collectorate (e.g., for the 'principal towns' Tullegaon, Kheir, Goreh, Otur, Narayangaon, Alley, Sasur, Jejuri and Tullegaon Turruff Pabal) all fall below the 5,000 mark—commonly used in socio-economic and urban history (and therefore also in the collab on global LR).

Dharwar collectorate is the most urbanized. Besides hosting seven towns above 5,000 inhabitants (enumerated in Table 6.10), it counted 36 towns with between 2,000 and 4,000 residents and 77 towns with between 1,000 and 2,000 souls. The 'chief towns'

Table 6.10 Urban Populations, Deccan, the 1820s and 1872

	1820s			Bombay Deccan 1874	
	Male	Female	Total		
>50,000	Poona PC ⁴⁶		81,315	Poona PD	90,436
20,000–50,000	Solapur PC		?	Solapur SD	53,403
				Ahmednagar AD	32,824
10,000–20,000	Ahmednagar AC*	9,303	17,838	Satara SD	24,484
	Majeedpur DC		15,387	Nasik ND	22,436
	Dharwar DC		11,802	Barsi SD	18,560
	Belgaon DC		11,037	Yeola ND	17,461
	Satara		?	Pandharpur SD	16,275
	Nasik AC		?	Chopra KD = Chopda	13,699
				Dhulia KD = Dhule	12,489
				Parola KD	12,235
				Kurar SD	11,410
				Dharangaon KD	11,087
				Erandol KD	11,071

						Wai SD	11,062
						Tasgaon SD	10,528
						Junnar PD	10,289
						Sinnar ND	10,044
5,000–10,000	Bagalkot DC (min)				8,000	?	?
	Junnar PC	4,218	3,759		7,977		
	Nandurbar KC				6,429		
	Chopra KC				6,000		
	3 towns DC				17,000		
Total urban					182,785		379,749
Total					3,285,985		5,223,237
Urban percentage					5.6		>7.2

Source: Sykes (1838, pp. 254–258); IOR/Eur. Mss. D 148, 29–30; Choksey (1955, p. 27).

Note: For the administrative divisions, see Table 6.1 (C = Collectorate, D = District), *alternative figures for Ahmednagar 1828: 21,208 inhabitants (11,019 men and 10,198 women) in D 148, 29–30, cf. Sykes (1838, p. 298).

in the Ahmednagar collectorate are Kurdeh, Nashik, Chandore, Sangamner and Parner (Sykes, 1838, p. 257). We may conclude, therefore, that the urbanization rate was very low. On the other hand, we must realize that the countryside contained many 'towns' with only a few thousand inhabitants.

For some urban centres, Sykes (1838, pp. 266–267) also provides the number of inhabitants per house(hold), which is invariably higher than in the countryside, for example, for the city of Poona 6.5 (against 4.79 for the entire collectorate), and for three cities in the Dharwar Collectorate (4.48 per house overall): Belgaon 5.24; Chabee 5.78; and Gunness Pait 5.77 inhabitants per house.

In sum, the urban population data for the early 19th century are poor. We can only compute directly the growth rates of four towns between the 1820s and 1872: the Poona of the 1820s had some 90 per cent of the number recorded in 1874; for Ahmednagar, it is 55 per cent or 65 per cent; Junnar 80 per cent; but Copra only 44 per cent. In particular, figures from Solapur, Satara and Nasik, all with more than 20,000 inhabitants in 1872, are obviously missing in the category of towns with over 5,000 residents in the 1820s. If these three towns in the 1820s already had 75 per cent of their inhabitants in 1874, this would equate to 40,000 people. For Satara, this would yield a hypothetical population of 18,000, and for Nasik 17,000 inhabitants in the 1820s.⁴⁷ For the other missing towns with over 5,000 inhabitants in the 1820s, we should consider that they were home to at least another 75,000 to 100,000 inhabitants. If we follow this line of reasoning, we might come up with over 300,000 town dwellers in the 1820s. But all this is so uncertain still that, for now, I prefer to use a minimum, rather than a maximum, urbanization rate.

For the Poona collectorate, where the capital was situated, as well as for Solapur, the Deccan's second city, I take 20 per cent of the total population to be urban (110,000); for Ahmednagar and Dharwar collectorates 10 per cent (respectively 67,000 and 48,000); but only 5 per cent for the least urbanized collectorate, Khandesh (c. 24,000).⁴⁸

As an intermediate step in reconstructing the LR of the Deccan, we may now present the following overview on the basis of the previous discussions and tables featured in Sections 6.2–6.4 (i.e., unable to work estimated at 30% and differentiated urbanization rates).

Table 6.11 Basic Demographic Estimates as a Point of Departure for the Reconstruction of Labour Relations (Excluding Slaves, Military and *Bhils*) × 1,000, Deccan, the 1820s

	Khandesh			Poona			Ahmednagar			Dharwar			Deccan Total		
	U	R	T	U	R	T	U	R	T	U	R	T	U	R	T
Heads of households	5	91	96	22	88	110	13	120	133	10	158	168	50	457	507
Dependents	12	227	239	55	220	275	34	299	333	24	396	420	125	1,142	1,267
Subtotal able to work (70%)	17	318	335	77	308	385	47	419	466	34	554	588	175	1,599	1,774
Unable to work (30%)	7	136	143	33	132	165	20	180	200	14	237	251	74	685	759
Total	24	454	478	110	440	550	67	599	666	48	791	839	249	2,284	2,533

Note: U = urban population; R = rural population.

To reconstruct the LR of those inhabitants that are able to work, for the time being, I am assuming that they did actually work. Of course, there will have been a number of affluent people who were fit for work but who did not do so, but I do not know of any data that enable me to estimate their numbers for the Deccan in the 1820s.⁴⁹ Consequently, the outcomes for especially the self-employed may be on the high side, especially as 'affluent' people (think of wealthy traders and in particular their dependent spouses and children) may be hidden among them (labrel 3). Research in Goa and in other parts of the world related to this period suggests that this might comprise between 1 per cent and 3 per cent of the population (de Matos & Lucassen, 2020).

6.5. URBAN OCCUPATIONS AND LABOUR RELATIONS

We move now from these introductory skirmishes to the main parts of this chapter, namely occupations and LR in the towns. In fact, Sykes is extremely brief on urban labour or LR.⁵⁰ He provides some information on shops, markets and trade, and some details on the crafts related to the textile trades.

Pune was not only the largest town (notwithstanding its decline since the war) in the 1820s Deccan, but we also happen to have a fair idea of its occupational structure. In 1825–1826, it was part of the *pargana* of Haveli which as per the data had 107,217 inhabitants and 18,509 inhabited houses, of which 26,000 inhabitants are dubbed 'rural'. If we equate all 4,132 cultivators in this *pargana* with 'rurals' (all of whom were classified as Shudras), we may suppose that the occupational structure of an estimated 80,000 urbanites, of which 14,000 are household heads reflected are presented in Table 6.12. It is a pity that Sykes never makes a cross-tabulation of his social and occupational categorizations.

The reconstruction of the occupational structure of Pune, attempted in Table 6.12, clearly shows that Sykes did not include Brahmin and Rajput household heads in his occupational lists, but how precisely categories such as Shudras, low caste and Muslims are linked to occupations remains uncertain. Some occupations, listed here from carpenter downwards to silversmith, are, at least in rural Deccan, listed as *Bara Ballooteh* (also spelled *Bullooteh*)

Table 6.12 Occupational and Social Structure of Heads of Household, Haveli *Pargana*, 1825–1826

	Heads of Household	Social Categories
Shopkeepers	3,148	Shudras and Muslims
Weavers	267	
Tailors	958	
Braziers	400	
Carpenters	243	Shudras and Muslims
Shoemakers	477	
Ironsmiths	132	
Mahr (as they were called by Marathas, and Dher by Muslims; see Sykes 1838, p. 290)	505	Predominantly low caste
Washermen	227	
Pot makers	403	
Barbers	454	
Sweepers	169	
Silversmiths	955	
Total occupations of household heads recorded	8,338 (60%)	
Other household heads, including:		
All Brahmins of this <i>pargana</i>	3,303 (23%)	
All Rajputs of this <i>pargana</i>	15	
Unrecorded occupations of urban Shudras (8,727 persons in total) and Muslims (1,286 persons in total) of this <i>pargana</i> to be considered as wage earners	2,344 (17%)	
Total household heads Pune City	14,000 (100%)	
Rural Haveli <i>pargana</i>	4,500	Shudras
Total Haveli <i>pargana</i>	18,500	

Source: IOR/Eur. Mss. D 148, 76.

professions (see below), and, as such, may also have been classified as low caste in an urban setting, at least from the Mahr/Dher category downwards.

Despite all these uncertainties, we safely may conclude that Pune in the 1820s mainly consisted of small shops and craftsmen's workshops and that there was no place for large enterprises. The best possible estimate, though very rough, is that about half of all household heads kept a shop of some kind and were therefore self-employed,⁵¹ assisted by a maximum of one or two wage dependents from outside the household; 30 per cent would have been wage dependent, working for those shopkeepers and craftsmen and as servants in households; and 20 per cent performed functions in the state apparatus and in temples (the Brahmins).

For the other, much smaller towns, we may suppose some similarities with Pune, but we are missing almost any details. Only for Ahmednagar city do we have an idea of the number of 'shops' in 1822 and 1828 (see Table 6.13). One in five households in Ahmednagar (i.e., only slightly less than in Pune) earned its living in such shops.

Precise data are not available for the collectorates of Khandesh and Dharwar, but there is no reason to suppose that shops and craftsmen's workshop in these locations were less important than in the central collectorates, as evidenced by the results of the *sahyer* trade taxation.⁵² As the figures make clear, this taxation would have been levied mainly in the urban centres. See, for example, the results of the tax registration for Fuslee (1237 AD, 1827–1828; Table 6.14).⁵³

Table 6.13 Shops in Ahmednagar City, 1822 and 1828

	1822	1828
Inhabitants	17,182	21,208
Household size (supposedly the same as Poona city)	6.5	6.5
Households (reconstructed)	2,643	3,263
Shops	557	559
Percentage of households occupying a shop	21	17

Source: IOR/Eur. Mss. D 148, 62–65.

Table 6.14 *Sahyer* Taxation and Customs (₹ per Year), Deccan, 1827–1828

		Poona C	Nuggur C	Dharwar C	Khandesh C
<i>Sahyer</i>	Sum (₹)	231,262**	59,007	334,668	131,710
	Persons taxed	14,551 23,042***	9,287 14,267*	29,046	9,147
	₹ per capita	15.89 10,04***	6.35 4.13*	11.52	14.40
Customs (₹)		241,114	159,150	141,524	155,560

Source: Sykes (1838, p. 296, 299, 304).

Note: *p. 305, **the capital city of Poona pays ₹56,202 of the total, that is, one quarter is paid by one-seventh of the total population of the collectorate, p. 306 (***few manufacturers).

I deliberately do not draw more precise conclusions from these tax sums, as the practice of this *sahyer* taxation remains clouded in many mysteries while actual tax registers have not been researched. *Sahyer* ('market' in Sanskrit) is 'the revenue raised from shops, markets, liquors, etc.' (see Table 6.15).⁵⁴ Sykes himself notes the low level of taxation in Ahmednagar and supposes that it has less to do with inherent differences with the other collectorates and more with opaque administrative procedures.⁵⁵ In reality, the number of *sahyer* taxpayers in the Ahmednagar collectorate, if properly administered, may have amounted to about 10,000 persons, which brings the total for the Deccan to about 73,000 persons. However, given the fact that not all of the Deccan is encompassed by the British collectors (for land revenue about two-thirds of all cultivators were taxed by the British at that time, see below), mutatis mutandis, this would imply 100,000 households in the Deccan that theoretically would have fallen under the *sahyer* tax.

Certainly, for a variety of reasons, Dharwar collectorate (the most southern one) may have been as urban as the central collectorates, albeit its towns were rather small. Sykes (1838, p. 119, 306) praises 'the magnitude of its *sahyer*, the comparative denseness of its population its numerous towns [...] and the manifestations of manufacturing industry in its numerous weavers is unquestionably the finest British province in Dukhun'. On the basis of this

Table 6.15 Economic Activities Taxed under the *Sahyer* System (₹ per Year), Vangi and Tullegaon, the 1820s

	Vangi (Pargana Vangi)	Tullegaon (Pargana Pabal)
Grain sellers (<i>Wanees</i>) and groceries <i>per shop</i>	4–6	
Other tradesmen <i>per shop</i>		7 (maximum)
Oilman <i>per oil mill in work</i>		3.5 (maximum)
Weavers <i>per loom</i>	3	1.75 (maximum)
Saddler, dyer, butcher		1.75
Fishermen, dealers in sweet potatoes, bridle makers		1
[tradesman's] house	1	
Turban ⁵⁶ weavers (Mameens, all Muslim) as <i>community</i>		25
Braziers as <i>community</i> ⁵⁷		10
shepherds as <i>community</i>		14

Source: Sykes (1838, pp. 317–318).

last quotation, it is tempting to suppose that many, if not most, of these 25,000 textile workers and their household members lived in urban centres, but we do not know for sure.

Certainly, customs data do not contradict this impression. Although mainly levied on the transit trade from the coast eastwards, and mainly paid in Poona, local Deccan textiles still played a role, in particular those from the south (Sykes, 1838, 306). In 1843, Sawunt Waree State reported importing 'rice, gram, dahl, and other grains, onions, garlic, pepper, tobacco, snuff, ganja, opium, cotton, and indigo, and all kinds of native cloths' from the Deccan.⁵⁸

Further information may be found in Sykes' (1838, pp. 325–326) description of the textile goods that were for sale in the markets of Poona in July 1829 (Table 6.16). Generally, the more expensive fabrics are all imported from elsewhere: from the Nizam's domains (Peytun,⁵⁹ Beed, Narrainpait, Tahr Putruh, Wuswunt, Nandergaon,

Table 6.16 Weavers, Deccan, c. 1820

Collectorates	No. of Inhabitants	Inhabitants per Weaver	Weavers
Poona	550,313	1:280	1,965
Ahmednagar	666,376	1:280 (estimate)	2,380
Khandesh	478,457	1:173	2,766
Dharwar	838,757	1:55	15,250
Total	2,483,903		[c. 25,000]

Source: IOR/Eur. Mss. D 148, 76–80.

Shahgur); Scindia's dominions (Burhanpur,⁶⁰ Jehanabad); Malwa; Berar (Nagpur); the Carnatic (silk) and Bijapur. Only the cheaper fabrics were made in the Deccan, with the exception of the Dharwar collectorate (Shahapur, Belgaon). The coarsest goods were also fabricated in Ahmednagar and in Poona itself (the cheapest goods). The significance of weaving for Dharwar is also clear from the concentration of weavers there: one weaver in 55 inhabitants. Or, put differently, the Dharwar collectorate had 'more than ten times the number of manufacturers (13,045 weavers) to be found in the [collectorates of] Poona and Khandesh'.⁶¹

Notwithstanding all this information on, in particular, trade, many questions remain if we are to reconstruct the occupational structure and, subsequently, the LR of the urban centres of the Deccan.⁶² Not all dependents may have been cooperating with the head of household in the same occupation. Some dependents would have been, but some of them—in particular among the better-off households—would have devoted their energies to household work (in the taxonomy, labrel 5). It is supposed that the latter situation prevailed among Brahmin households.

A simple calculation teaches us that for each household that might demand wage workers (in the reconstruction below between 27,000 and 38,000), there was a local supply from households of wage workers. This points to, on average, two to three wage dependents per 'employer household', that is, servants for both reproductive (household chores)⁶³ and productive work—all in all,

Table 6.17 Reconstruction of Primary Labour Relations of the Working Urban Population (Those Able to Work and Those Actually Working) × 1,000

Basis	Khandesh			Poona			Ahmednagar			Dharwar			Deccan			Total
	HH	DE	T	HH	DE	T	HH	DE	T	HH	DE	T	HH	DE	T	T
Self-employed [LR 12a]	3		3	13		13	8		8	6		6	30			30
Their dependents doing household work [LR 4b]		3	3		13	13		8	8		6	6		30		30
Their dependents cooperating with them [LR 12b]		4	4		20	20		12	12		8	8		44		44
Wage workers estimate [LR 14]	1		1	4		4	2		2	2		2	9			9
Their dependents also doing wage work [LR 14]		2	2		9	9		6	6		4	4		21		21
Working for the polity (Brahmins) [LR18]	1		1	5		5	3		3	2		2	11			11
Their dependents doing household work [LR 4b]		3	3		13	13		8	8		6	6		30		30
Total working	5	12	17	22	55	77	13	34	47	10	24	34	50	125		175
Not working [LR 1]			7			33			20			14				74
Total urban population			24			110			67			48				249

Source: Based on Tables 6.11, 6.12 and on the considerations in this section.

Note: HH = heads of household; DE = dependent household members working; T = total working; LR = Labour relations, according to the collab taxonomy in Hofmeester et al. (2015).

a not impossible result. We may take comfort from the fact that the urban population in the Deccan is relatively insignificant and that mistaken estimates in this section of the chapter have less consequences for the overall picture than if similar mistakes were to be made in the next section on LR in the countryside.

6.6. OCCUPATIONS AND LABOUR RELATIONS IN THE COUNTRYSIDE

On the agricultural predominance of the Deccan, Sykes is very clear. His detailed occupational statistics show that roughly half of all rural heads of household for which more detailed information is available are registered as cultivators.⁶⁴

Before disaggregating this agricultural population, let us first explore what kind of other occupations are to be found in the countryside. As was the case for cities, here we can distinguish between Brahmins and second the *jajmani* occupations.

Apart from the cultivators (about whom more below), Sykes (1838, pp. 281–282, 285–286, 291–292) registered a second occupational category, namely the *Bara Ballooteh* or 12 hereditary village officers, supported by the agriculturists. This group is subdivided into classes: the first class encompasses the carpenter, shoemaker, ironsmith and Mahr; the second the washerman, the pot maker, the barber and the Maang (skinner cum ropemaker) and the third class includes the waterman, astrologer, temple cleaner/attendant and the silversmith. Furthermore, following the introduction of ‘Musalman rule’, the Maulana and schoolmaster were added to this group. The grain entitlements of *Bara Ballooteh* were so substantial that they were taxed by the government: ‘the Bara Bullooteh have annual grain fees from the cultivators; and government, in former times, deeming these fees more than commensurate with the value of the labours performed, took a part of them in money’ (Sykes, 1838, p. 318). As Table 6.19 demonstrates, this taxation must have been very selective, as there is no visible relation with the occupational registration.

Taking the occupational registration of the selected population as a basis, we see that this accounts for a substantial part of the village population. The fact that a number of occupations (Maang, waterman and astrologer) register zero in Table 6.20 may be explained by the fact that a small proportion of them will have

Table 6.18 Reconstruction of the Number of Rural Heads of Household, Deccan, the 1820s

Colls	A		B		C		D		E		G	
	Total Population x 1,000		Selection x 1,000		B as % of A		Rural Selection x 1,000		Household Size		Rural Heads of Household Selection x 1,000	Rural Heads of Household Total Population
Khand	478		371		78%		352		3.96		89	91
Poona	550		331		60%		265		4.79		55	88
Ahmednagar	666		625		94%		562		4.89		115	120
Dharwar	839		741		88%		669		4.48		149	158
Total	2,533		2,068		82%		1,848				408	457

Source: A, B, E: see Table 6.2; G: see Table 6.11. Key for 'selection', see Table 6.2.

Table 6.19 Registered and Taxpaying *Bara Ballooteh* (Selected Population), Deccan 1827–1828

Collectorates	Ballooteh Taxpayers 1827–1828	Registered in Selected Population
Khandesh	2,348	15,145
Poona	8,481	14,758
Ahmednagar	4,980	[20,000]
Dharwar	2,811	24,887
Total	18,620	[74,790]

Source: Sykes (1838, p. 299); last column, see Table 6.20.

Table 6.20 Registered *Bara Ballooteh* Occupations (Selected Population)

	Heads of Household with Occupation Given (Selected Population)			
	Khandesh	Poona	Ahmednagar	Dharwar
B1.1 carpenters	1,252	1,046		2,601
B1.2 shoemakers	1,410	1,669		644
B1.3 ironsmiths	757	516		1,872
B1.4 mahr/dher	5,922	6,072		11,087
B2.1 washermen	694	847		2,203
B2.2 pot makers	706	1,038		1,551
B2.3 barbers	1981	1,327		2,516
B2.4 maang	0	0	0	0
B3.1 waterman	0	0	0	0
B3.2 astrologer	0	0	0	0
B3.3 sweepers	49	191		8
B3.4 silversmiths	2,374	2,054		2,405
Total	15,145	14,758	[16,000]	24,887
Cultivators	37,311	35,335	37,311	70,488
B as % of cultivators	41	42	[42]	35

Source: IOR/Eur. Mss. D 148, pp. 76–80; cf. Sykes (1838, pp. 278–279).

lived in urban centres (see Table 6.12). Consequently, in return for their services, the cultivators are responsible for the upkeep of an extra 35 per cent to 42 per cent of their cohort.

Assuming that the farmers kept more for themselves than they gave away to the village servants or *Bara Ballooteh*, we can agree with Sykes (1838, p. 291) when he writes that 'many farmers in various parts of the country assured me that they put by 25 per cent of their produce for the village craftsmen and professions.'

We can now calculate how many rural heads of households are still missing from the selected rural population (Table 6.21).

Except for the Poona collectorate (the only one for which the data are more or less complete), all estimates and calculations made so far suggest that between about 40 per cent (Khandesh and Dharwar) and 54 per cent (Ahmednagar) of the village population consisted of persons other than cultivators and *Bara Ballooteh* (and a few percentages less if we take Brahmins into account).⁶⁵ The question now is what kind of occupations we must attribute to this unknown group. I will try to solve this problem via some indirect information (for the results, see Table 6.25).

In a rather sweeping statement, Sykes (1838, p. 266) tells us that half of the total Deccan population comprises agriculturalists. He does, however, add an important qualification: 'these proportions are derived from the registered farmers only, and as they are in the habit of subletting their lands, I have no hesitation in expressing my opinion that exact returns would prove that three-fourths of the population are engaged in agriculture.' It is probable, therefore, that—again, with the exception of the Poona collectorate—about one-third to one-half of these 'others' for whom no occupational data are available were cottagers sub-renting small plots from the cultivators, and, consequently, the other half to two-thirds of them were agricultural wage earners.

Before going deeper into these two categories of small tenant farmers and agricultural wage labourers, a few words about the seemingly deviant results for the Poonah collectorate. The reason must be found in the totally different character of the agriculture in this hilly area, situated on the eastern slopes of the Western Ghats. Whereas the average farm size in this region is only four hectares, in the plains of this same collectorate farms can be as much as 14

Table 6.21 Reconstruction of Categories of Rural Heads of Household (Selection × 1,000), Deccan, the 1820s

Collectorate	Rural Heads of Household Total Population			Rural Heads of Household Selection			
	Total	Brahmin	Other	Cultivators	Bara Ballooteh	Other	Total
Khandesh	91	4	87	37 (42%)	15 (16%)	37 (42%)	89 (100%)
Poona	88	3	85	35 (64%)	15 (27%)	5 (9%)	55 (100%)
Ahmednagar	120	5	115	37 (32%)	[16] (14%)	[62] (54%)	115 (100%)
Dharwar	158	5	153	70 (46%)	25 (17%)	54 (37%)	149 (100%)
Total	457	17	440	179	[71]	[158]	408

Source: IOR/Eur. Mss. D 148, pp. 76–80; Table 6.18.

hectares (Sykes, 1838, p. 266). In these small, hillside villages, there was little space for a substantial number of *Bara Ballooteh*. Indeed, Sykes (1838, p. 285) emphasizes that in an average Deccan village, there were '12 Bara Ballooteh per village depending on the capacity of the village to support them'.⁶⁶ This capacity for both subletting and agricultural wage labour must have been very low in the hill villages. Moreover, if we consider the greater share of urban *Bara Ballooteh* occupations (see previous remarks about Haveli), it is safe to assume that a minority of the 'other' household heads in the Poona collectorate worked on small, sublet tenant farms and that the majority were wage labourers. In this respect, the plains of the Poonah collective were not very different from the adjacent Ahmednagar plains.⁶⁷

In order to understand the nature of these regional differences within the rural Deccan and its consequences for the LR and, in particular, the proportions of cultivators, small peasant tenants and farm labourers, we must go deeper into the many production details that Sykes provides on the cultivators, their tools and their cattle (see Table 6.22). This will enable us to make the final subdivision between small tenant farmers and agricultural labourers. For the Deccan in general, we have Sykes' statement that these numbers may account for half of all cultivators in the Deccan. However, it is obvious that the opportunity for subletting is substantially higher among cultivators with larger plots. We must also look at the plains of Ahmednagar and the eastern Poonah collectorates and at Dharwar. We will do this collectorate by collectorate in order to establish which scenarios seem to be most likely (see last line in Table 6.22).

Let us begin with Khandesh, the collectorate that had been most devastated in the recent war and where many farms and even complete villages were deserted in the early 1820s. Small farms were the rule, which makes it unlikely that substantial numbers of them could be sublet without endangering the existence of the cultivators themselves. On the other hand, there were ample opportunities for wage labour, both in agriculture and transport. Characteristic for the small farms here was their specialization in market gardening, together with important cattle farming. The latter was essential for manuring the gardens, which, at the same

Table 6.22 Agricultural Characteristics (Selected Population), Deccan, 1822

		Khandesh		Poona	Ahmednagar		Dharwar
General population density/sq. m		38		66	67		92
Cultivators		37,311		35,335	37,311		70,488
Average ha/cultivator		7		Plain 14	Plain 14		13
				Hills 4			
Ploughs		43,518		20,259	?		99,883
Ploughs/farm (incl. sublet parts)		1.2		0.6	[2?]		1.4
Bullocks	Draught	22,945		80,467			18,959
	Pack	6,750		13,588			27,238
	Total	29,695		94,055	212,008		46,197
Bullocks/farm (incl. sublet parts)	Draught	0.6		2.3	?		0.3
	Pack				?		
	Total	0.8		2.7	5.7		0.6
Draught bullocks/plough		0.7		4.0	?		0.2
Carts		13,680		3,112	?		5,192

(Table 6.22 Continued)

(Table 6.22 Continued)

		Khandesh			Poona	Ahmednagar	Dharwar
Cows and buffaloes	cows					198,420	
	He-buffaloes					17,023	
	She-buffaloes					46,797	
	Total	157,667			63,251	262,240	301,710
Cows/farm (incl. sublet parts)		4.2			1.8	7.0	4.3
₹ rent/farm (incl. sublet parts)		37			28	43	32
Horses						637	
Mares						1,863	
Tattoos						12,632	
Sheep						114,899	
Goats						21,185	
Camels						24	
Occupational opportunities for those who were not cultivators or <i>Bara Ballooteh</i> (rough estimates)		wage labour in market gardening and in transport			In the mountains: none; in the plain: one-fifth subletting; four-fifths agricultural wage labour		Two-thirds subletting; one-third agricultural wage labour; cottage weavers

Source: IOR/Eur. Mss. D 148, 76–80.

time, were intensively irrigated. Gardening was also facilitated by the abundance of free pasturage, related to the extensive wasteland (Green, 1852, p. 4). This method of cultivation would have produced many job opportunities for the landless population in the villages. The cattle, and in particular the great number of draught animals, in combination with the exceptional number of carts opened up new employment possibilities. Many cultivators in this collectorate were engaged in road carriage between highly developed Berar and Bombay.

In a report of some decades later, Captain George Wingate writes that the transport carts on this route

are mostly owned by the cultivators there [Khandaish]. As soon as the harvest is got in, many of the cultivators either start off for Khamgaon, Berar, or look about at home for a fare to Bhewndy [Bhiwandi], from which they seldom return with their carts empty. A trip of this kind occupies them about six weeks, and they usually net from 20 to 25 Rupees, clear of all expenses, if they are at all fortunate. Some of them make two trips before the rains. They are fast appropriating the traffic of the Binjarries [...] In proof of the comparative abundance of money in Khandaish, I may also instance the fact that all labour there, agricultural as well as other, is paid for in cash, whereas in the Deccan and Southern Mahratta country agricultural labour is almost universally paid for in grain. (Green, 1852, p. 47)

A west-east divide runs across the Poona collectorate from north to south. To the west are the Ghat Hills (*Mawul*), while to the east, both in eastern Poona and in adjoining Ahmednagar, we find the plains (*Desh*). As we have seen, farms in the hills are extremely small and therefore easily managed with family labour. Apart from cultivators, there would have been few other households and a limited number of *Bara Ballooteh*. In the plains, by contrast, we should expect both the sublet cottage farms mentioned by Sykes (most likely by way of sharecropping, see Table 6.24) and an equal number of wage labourers offering their services to the large farms. The average farm size in the plains (about 14 hectares) seems to be on the edge of what a farmers' household can work without hiring paid labour. This is certainly the case in the very intensive rice

cultivation.⁶⁸ Moreover, the extension of the markets supports this notion: a substantial part of the agricultural products was sold in the marketplaces that are to be found everywhere in the region. These markets fundamentally catered to the local population, as exports (grains and rice) from and imports (salt) to the Deccan are minimal.⁶⁹

The fact that markets are held frequently, are well attended and readily accessible for the farmers is illustrated by Sykes' detailed description of the one held at Goreh (a turruff in Poonah collectorate) on 26 January 1826.⁷⁰ On that day, this town of 2,299 inhabitants (1,154 men and 1,145 women) counted no less than 208 sellers (equating to 11 inhabitants per seller), mostly from surrounding places up to 14 miles away. The very detailed list may be summarized as follows (Table 6.23).

This list shows that many agricultural producers sold directly to (rural) customers. Only a minority of the sellers mediate between the producers and the consumers, most notably professional traders in textiles and luxury goods. Two questions arise from this: who are the buyers, in particular of the grains and garden produce (121 out of 208 sellers)? One would suppose they are not people producing these products themselves, that is, either (mainly urban) craftsmen or wage labourers. Second, if this particular market day at Goreh is a true reflection of a situation where great number of farmers sell their own products directly to the consumer, does this imply that they are self-producers without paid labourers, or not necessarily so?

The first question may be addressed through a systematic analysis of the details provided by Sykes on wage labourers.⁷¹ Indeed, this is a question he takes very seriously.

The amount of wages of agricultural labourers is of so much importance to the class constituting the major part of the community and it assists the judgement so materially in estimating the condition of the people that I feel myself called upon to offer all the details I have been able to collect, bearing on the question. [...] I shall enumerate the various places where I made my inquiries on the subject of wages and an inspection of the map accompanying the geographical sections will show that towns and villages the most distant of each other have been chosen to prevent the mistake of the adoption of local rates for the general operation.⁷²

Table 6.23 Sellers at the Market of Goreh, 26 January 1826

<i>Products</i>	<i>Origin</i>	<i>Female</i>	<i>Male</i>	<i>Unknown</i>	<i>Total</i>
Grains	Goreh and surroundings	9	2 (incl. 1 <i>kunbi</i>)	58	82
	Other places up to 8 miles away	10	3		
Textiles	Bhaater* from Goreh and surroundings			22	34
	Khoshtee and Saalee (weavers) from surroundings			9	
	Momeen or turban sellers			3	
Money	Shroffs from Junnar (14 m)			3	3
Luxury items	From places up to 14 miles away (incl. 3 strangers)		1	13	14
Garden produce	<i>Malees</i> from Goreh			12	39
	<i>Malees</i> from surroundings			27	
Cattle	<i>Seengoottee</i> or cattle sellers				0
Grocery, etc.	Goreh (cotton from the village lands, self-made cotton thread, dried fish)	2	1		23
	Origin other and unknown (grocery, sugar, spices, ghee, perfumed oils, candles, etc.)			20	
Shoes	Chamars from Goreh			9	13
	Chamars from surroundings			4	
Total		21	7	180	208

Source: Sykes (1838, p. 274).

Note: *They buy cloth from the weavers to sell.

His elaborate descriptions of 15 places have been summarized in Appendix 6.2, highlighting especially the type of work and the type of LR. The level of the wages is less important here for now. This detailed overview enables us to not only draw many conclusions but also pose many questions regarding LR. The most important seem to be as follows:

1. Wage labour was widely spread, both in the form of permanent and seasonal labour.
2. People were prepared to commute, increasing their action radius up to 10 miles, and, consequently, offering a degree of choice as to their employers; seasonal migrations may even have occurred.
3. Given the fact that people made very long working days in a system of piece wages, there is no doubt as to their 'industriousness', whatever the reason for this may have been, most likely sheer need.
4. Returning to the buyers at marketplaces who, one might suppose, had to pay in cash (Sykes also devotes much attention to coin circulation) and considering that most wage labourers were paid in kind, one might ask how the wage labourers had to proceed to convert their wages in kind into cash. If this rarely happened, the question remains, who were the undoubtedly numerous buyers in the rural marketplace if not wage labourers or (one might suppose) farmers (except for the luxury goods)?
5. The *kunbis* were in a very degraded position at the time and often forced to borrow food grains from usurers. Sykes notes⁷³:

At Moteh, Moteh Khoreh on the 12th March 1825 the people paid 1½ mun of grain for the mun borrowed for 6 months or 100 per cent per annum; At Chakun, Turruff Chakun on the 25th March 1825 the koonbees paid the same; At Degreeah, Turruff Wareh the usual rate was 1½ for p. but on the 13th May the shopkeeper demanded 3 pupuhelees for 1 puhelee for 6 months or 400 per cent per annum. With respect to the loan of money the established rate is 24 per cent per annum.

He concludes:

The present state of the koonbees does not appear to be the result of our Revenue Administration. They were in extreme

difficulties when they came under our Govt and the relations of supply and demand with respect to agricultural produce have not been sufficiently favourable to the Koonbees subsequently to promote their relief. With the limited experience of sixteen months in statistical enquiries any opinion I may have formed on the means of promoting the interest of the cultivator without sacrificing that of the Government must be subject to modifications from the operation of general causes in the Dekkun. I speak of a few districts; and facts with respect to the country at large may militate against my opinions. From a near view however of the internal economy of the cultivators I should think the maintenance of the present land assessment with its accompaniment of 'Babtees' (extra assessments) problematical; unless an increasing demand for agricultural produce meets the anticipated increasing supply—unless additional export articles be raised, and finally unless manufactures be improved and extended.

An analysis of nine extremely detailed farm budgets provides more information on agricultural labour in the Deccan. Two concern sharecroppers, three self-employed workers who use wage labour sparsely, and the remaining three are rentiers who work their plots exclusively with wage labourers.

Finally, in Dharwar collectorate in the south, farm size is equivalent to that of the plains of Ahmednagar, which also makes sharecropping as well as wage labour by the landless most likely. The difference is the comparatively lower number of ploughs per farm, draught bullocks per plough and cows per farm. This suggests a lower intensity of farming. Hence, I propose in Table 6.22 (last row) a higher incidence of subletting than of wage labour for Dharwar. Captain George Wingate seems to support this line of argument as he not only praises the good quality of the soil in this collectorate but also the certainty of rainfall and the higher yield per acre from soils of equal natural fertility, as well as the great qualities of Dharwar cultivators.

The cultivators are chiefly Lingayuts, and, as a class, are intelligent and frugal, except on great occasions, such as marriages, &c., and with a keen love for money and great aptitude for trading. Many of them lend money to their poorer neighbours, and in addition to their agricultural occupations take up the trade of the Marwarree in the Deccan, besides. They are speculative, and far less wedded to old customs than the

Table 6.24 Farmers' Household Budgets, Showing Employment of Male and Female Wage Labourers, Deccan 1824–1825

Type of Cultivation	Organization	Surface in Sq. M.	Household Labour (Days M/F)	Wage Labour (Days M/F) [Plus Days/ha]
Summer grain	Rentier	3,050	0	43 M [141 d/ha]
Sugarcane growing	Rentier	3,050	0 0	166 M [544 d/ha]
Sugar production				173 M/14 F [633 d/ha]
Wet grain	Rentier	30,500	0	54 ?M [18 d/ha]
Sweet potatoes	Sharecropper	602	?	48 M [797 d/ha]
Brinjals	Sharecropper	602	?	42 M [698 d/ha]
Wet grain	Self-employed	3,050	unknown	21 M [69 d/ha]
Wet grain	Self-employed <i>kunbi</i> with full-time servants (6 M/6 F)	36,600	unknown	360 M/360 F [197 d/ha]
Dry grains mixed	Self-employed <i>kunbi</i>	36,600	unknown	360 M/360 F [197 d/ha]

Source: IOR/Eur. Mss. D 144, 561–562, 565–571.

ignorant prejudiced Coonbee [i.e., the cultivators in the more northern collectorates], and have little hesitation in striking into a new path if it promises to lead to profit. (Green, 1852, pp. 109–110)

To sum up the reconstruction of LR of the heads of household in the countryside of the Deccan, see Table 6.25.

Extrapolating the selected parts of the Deccan for which we have enough information (Table 6.25) and taking into consideration what we know about the various collectorates or their parts (think of hilly and plain Poona collectorate), I can now reconstruct the LR of the rural Deccan as a whole (Table 6.26).

Table 6.25 Reconstruction of Labour Relations (Selected Population × 1,000), Rural Deccan, the 1820s

Collectorates	Heads of Households	Of Whom Brahmins	Of Whom Other Occupations			
			Of Whom Cultivators	Of Whom Bara Ballooteh	Of Whom Wage Labourers (Including Sharecroppers)*	Subtotal
Khandesh	91	4	37 (42%)	13 (16%)	37 (42%)	87 (100%)
Poona	88	3	54 (64%)	23 (27%)	8 (9%)	85 (100%)
Ahmednagar	120	5	37 (32%)	16 (14%)	62 (54%)	115 (100%)
Dharwar	158	5	70 (46%)	26 (17%)	57 (37%)	153 (100%)
Total	457	17	198	78	164	440

Source: Table 6.21, now with a subdivision of the category 'of whom other occupations' for all rural household heads, subdivided according to the proportions arrived at for the selected population.

Note: For a possible subdivision between sharecroppers and wage labourers, see the last row of Table 6.22.

Table 6.26 Reconstruction of the Primary Labour Relations of the Total Rural Population (Those Able to Work and Those Actually Working) x 1,000, Deccan, the 1820s

Basis	Khandesh			Poona			Ahmednagar			Dharwar			Deccan Total		
	HH	DE	T	HH	DE	T	HH	DE	T	HH	DE	T	HH	DE	T
Self-employed [LR 12a]	37			54			37			70			198		198
Their dependents doing household work [LR 4b]		37			54			37			70			198	198
Their dependents cooperating with them [LR 12b]		55			81			55			106			297	297
Bara Ballooteh [LR 7]	13			23			16			26			78		
Their dependents cooperating with them [LR 7]		33			58			40			64			195	
Wage workers estimate [LR 14]	37			8			62			57			164		
Their dependents also doing wage work [LR 14]		92			20			155			143			410	
Working for the polity (Brahmins) [LR18]	4			3			5			5			17		
Their dependents doing household work [LR 4b]		10			7			12			13			42	
Total working	91	227	318	88	220	308	120	299	419	158	396	554	457	1,142	1,599
Not working [LR 1]			136			132			180			237			685
Total rural population			454			440			559			791			2,284

Source: Based on Tables 6.11, 6.25 and on the considerations in this paragraph.

Note: HH = heads of household; DE = dependent household members working; T = total working; LR = labour relations, according to the collaboration in Hofmeester et al (2015).

Table 6.27 Reconstruction of the Primary Labour Relations of the Total Population \times 1,000, Deccan, the 1820s

Labour Relations	Urban Population			Rural Population			Total Population		
	M	F	T	M	F	T	M	F	T
1	40	34	74	345	340	685	385	374	759
4b	0	30	30	0	198	198	0	228	228
4b Dep of 18	10	20	30	21	21	42	31	41	720
7 HH	0	0	0	78	0	78	78	0	78
7 Dep	0	0	0	66	129	195	66	129	195
12a HH	30	0	30	198	0	198	228	0	228
12b Dep	22	22	44	200	97	297	222	119	341
14 HH	9	0	9	164	0	164	173	0	173
14 Dep	11	10	21	130	280	410	141	290	431
18 HH	11	0	11	17	0	17	28	0	28
Total	133	116	249	1,219	1,065	2,284	1,352	1,181	2,533

Source: Tables 6.6, 6.11, 6.17 and 6.26.

Note: M = male; F = female; HH = heads of household; Dep = their dependents; LR according to the Collab-taxonomy in Hofmeester et al. (2015): 1 Non-working; 4b Dependent kin producers for the household; 7 redistributive labourers; 12a self-employed leading producers; 12b self-employed kin producers; 14 wage labourers; 18 wage labourers for the polity.

Forgetting for a moment all other LR (and the elaborate calculations and considerations needed to produce the final reconstruction in Table 6.27) and concentrating on the wage labourer—the initial question of this chapter—we find that some 600,000 (i.e., 30,000 urban and 574,000 rural) inhabitants may be qualified as such, that is, roughly one quarter of the total Deccan population in the 1820s. Even accepting considerable margins of error, compared to the outcomes of later occupational censuses (11% 80 years later, see Introduction), this is quite a high proportion at this early date. More than half of these 600,000 wage labourers might have to be qualified as sharecroppers, that is, they were paid in half

of the produce from their sub-rented plot (196,000 in the Poona–Ahmednagar plains and 133,000 in Dharwar). Although especially this proportion is very tentative, given all the estimates this figure is based on, we may say that between 10 per cent and 15 per cent of the total population would have been sharecroppers and a similar proportion receiver of direct wages.

Another implication is that the degree of deep monetization had not changed substantially between the start of the British occupation of the Deccan and the beginning of the 20th century, three generations later, notwithstanding the pretensions of British rule, the building of the railways and the development of industrial crops like cotton.

6.7. WAGE LEVELS

Finally, having established the importance of waged work, I now offer some information on the wage level itself. The data on wages in the Sykes manuscript can be divided into two parts, one pertaining to farm labourers and the other to artisans and urban labourers (Tables 6.28 and 6.29). Sykes included a set of wage figures reportedly paid by the Peshwas, 15 years previously, to the same category of non-agricultural workers that he surveyed. These data could be dismissed as hearsay, marshalled to show the improvements that followed the new regime, but that would be wrong as they do concur with the carefully researched Divekar set of wages and, thus, are included here.

Sykes (1838, p. 323) concludes:

that the highest money wages paid by the natives to any husbandry or domestic servant was four rupees per month, with which he finds his own food and clothes or 2 1/12 rupees per month is the pay when the master supplies food and clothes; and the most favourable wages to a man day-labourer are eight pice per diem and to a woman five pice.

The extreme difference that exists between the earnings from agricultural labour and non-agricultural labour is striking. These differences persist in almost all occupational earning tables available

Table 6.28 Wages of Agricultural Labourers, Bombay–Deccan (Monthly Pay in ₹), 1827, 1830–1831

	1827, Mainly Ahmednagar			1830–1831, Pune and Solapur
	Cash	Grain	Per Month	
Farm servant ^a	1.25	Food	2	
Casual farm labourers ^b	0	2.3	2.3	
Casual farm labourers, men ^c	0	1.25	1.25	1.88–2.81
Casual farm labourer, woman ^d	0	1.56	1.56	
Highest wage of farm labourer, full-time, male	–	–	4	2.96–3.31

Source: Divekar (1989a, pp. 173–176); Sykes (1827, 1838, pp. 320–322; very extensive, summarized here, 1830–1831).

Notes: a. 'Yearly husbandry servants' of Nandur, Ahmednagar, the standard rate.

b. Daily wages ₹0.09, converted into per month wages, assuming 25 days of work in a month.

c. Two ser of bajra per day per man. Converts into ₹0.05 or ₹1.25 per month.

d. Daily wage is one-sixteenth of a ₹ for a full day's work.

for the first half of the 19th century (see Table 6.29). They also persist in the late 19th century, but in a muted form. The ratio of the wages of skilled general-purpose artisans to the wages of agricultural labourers in 1875 was approximately 3:1; and if we were to include the factory workers in the former, then this figure would be slightly higher (Roy, 2007; cf. Atkinson, 1902). There are two ways in which we can explain the persistence of such gaps. First, there was little scope for crossovers between unskilled labour and semi-skilled labour. In that case, agricultural workers formed a world that had severely limited opportunities for occupational diversification. Second, the agricultural wages were unresponsive to many changes in the economic environment owing to the very low productivity of the soil.

From his comparison of wages in 1814 and 1828, Sykes derives the proud conclusion that the lives of the ordinary man and woman had become much better since the British conquest,

Table 6.29 Wages/Earnings of Non-agricultural Occupations, Bombay–Deccan (Monthly Pay in ₹) 1814, 1828

	<i>Average of All Observations, 1828</i>	<i>Before Annexation, 1814</i>
Master carpenter, finest worker	30, 35, 45	15, 20, 40
Master carpenter	25, 35, 40	15
Second-grade carpenter	24	12
Common carpenter	15, 22.5	12
2 sawyers	15, 22	8
Master blacksmith	25, 30	20
Smith	15, 22.5	12
Head armourer	30	20
Armourer	15	12
Fileman	15	12
Hammerman	6, 8, 13.5	7.5
Master leather worker	15	12
Harness maker, leather maker	9.75	9
Waterman	15	9
Master bricklayer	25, 35	15, 20
Bricklayer	9.75, 12	10
Master tailor, fine worker	15	14
Tailor	9.75	6
Labourer, man	5, 7	5
Labourer, woman	3.75–7	3–4
Labourer, boy	3.75	3
Horse keepers	8	5
‘Camel men’	8	5
Chief of <i>hamals</i>	15	10
<i>Bhooee hamal</i>	7–9	7
Chief of <i>doli</i> -bearers	15, 20	8
<i>Doli</i> -bearer	7–9	6

Source: Sykes (1838, pp. 320–322).

Note: Wages are reported as monthly wages. Where several observations for the same category are reported, the simple average is taken. Omitted here are several minor occupations, such as armourer, waterman and *doli*-bearers.

especially 'while grain became from 20 to 50% cheaper under the British'. When comparing 1825 and 1826, he sometimes attributes annual wage differentials to price fluctuations, or to a shortage of labour (e.g., in the neighbourhood of Poona), but also to the preparedness of employers to allow for higher or lower wages.⁷⁴ However precise and careful Sykes has appeared to be in collecting and presenting his data, this conclusion probably has to be qualified as wishful thinking. Another extensive wage table, published in 1826, and collected by W. D. Robertson, Superintendent of Bazzars (military markets) at about the same time as price was at best shows wage stagnation in comparison to the pre-British period (Table 6.30).

Artificers, in general, work by the month or day, there are however many instances when they do not; Basket or mat-makers work frequently by the number of baskets or cubits square of mat; and the price asked for these articles allow their makers to earn fair compensation; At Poona (B), the Mokudum who is employed to procure hamals, or the Choudry who brings artisans or workmen (there is a Choudry for each class) is entitled to an established fee for each person he supplies; Bricklayers and chopperbunds often contract for their labour, the first by the measure of length called a brass, the latter by the cent square cubits in the superficies.

We encounter few good oil painters, but they usually work by the day; Sawyers are of all castes, and work in all ways, in accordance with usage of their class; Stonecutters usually work by the cubit, and the roughness or fineness of the work determines the price.

The weaver, who is only to be found in towns or cities, is paid a percentage of the value of his goods; These tables are prepared in rupees and annas, where sixteen annas equal one rupee. Though this is not the money of Account at the Presidency, it is nevertheless appropriate for those tables that apply to stations throughout the territories adjacent to, and connected with it.

The same optimistic view about the beneficial influence of British rule on standards of living, or an even more upbeat version of it, may be found in a publication of 1852 by Henry Green, 'Professor of

Table 6.30 Usual Rates of Hire per Month of Artificers, Coolies, Etc., at the Principal Military Stations (in ₹ and Annas per Month)

	Baroda		Kaira		Malegaon		Mhow		Poona		Rajkot		Surat	
	Gujarat	Gujarat	Gujarat	Gujarat	Deccan	Deccan	Madhya Pradesh	Madhya Pradesh	Deccan	Deccan	Gujarat	Gujarat	Gujarat	Gujarat
					Khandesh		Poona		Collectorate		Collectorate		Collectorate	
Basket or matmaker	10:0	7:8	10	6: 1½	10	10	10	10	10	10	10	10	10	7:8
Blacksmith mistry	15:0	15	15	–	15	15	15	15	15	15	22:8	22:8	10 to 15	10 to 15
Blacksmith	12:0	7:8	10:12	–	10:12	10:12	10	10	10	10	15	15	8	8
Blacksmith hammerman	7:8	6	10:12	–	10:12	10:12	10	10	10	10	13	13	9	9
Blacksmith bellows boy	5:0	5	6	–	6	6	5:10	5:10	5:10	5:10	9	9	7:8	7:8
Bricklayer mistry	15:0	15	15	11:4	15	15	15	15	15	15	15	15	15	15
Bricklayer	12:0	10	10	9:6	10	10	10	10	10	10	12	12	9¾ to 12	9¾ to 12
Carpenter mistry	15:0	15	15	–	15	15	15	15	15	15	22:8	22:8	15	15
Carpenter	12:0	10	10	11:4	10	10	10	10	10	10	15	15	9¾ to 12	9¾ to 12
Chupperbund mistry	10:0	7	–	7:8	–	–	15	15	15	15	14	14	7:8	7:8
Chupperbund	7:0	6	–	4:10	–	–	10:0	10:0	10:0	10:0	12	12	6	6
Hamal Mokudum	10:0	9	9	–	9	9	B	B	B	B	13	13	6	6
Hamal	8:0	7	7:8	–	7:8	7:8	7:8	7:8	7:8	7:8	10	10	6	6

Horse keeper	8:0	6	8	–	7	8 to 9	6 to 10
Labourer man	7:0	5	6	–	5:10	7:8	4:14
Labourer woman	4:0	3	4	–	3:12	5:10	3:6
Labourer boy	2:0	2	4	–	3:12	5:10	3:6
Labourer girl	2:0	2	–	–	3	–	2:10
Painter oil	12:0	12	–	–	15	15	7:8
Potter or tilemaker	12:0	7	–	–	10	15	7:8
Sawyer ⁷⁵	7:0	12	25	–	30	12	24:8
Shoemaker or chuckler	10:0	7	10:12	–	10	15	7:8
Stonecutter 1st class	15:0	12	15	–	15	15	25:0
Stonecutter 2nd class	12:0	10	–	–	11:4	12	7:8
Tailor 1st class	15:0	10	15	9:6	15	15	7:8
Tailor 2nd class	12:0	7	9	7:8	10	10	7:8
Weaver	–	6	–	–	–	–	–

Source: Clunes (1826, pp. 209–210).

Table 6.31 Wage Developments (in ₹ and Annas), Poona 1775–1852

	1775–1804	1798–1820	1852
Stonecutter	15		15
Tailor first rate		15	15
Carpenter first rate	15	15	15
Carpenter second rate [1775–1804 'servant under carpenter']	7:8	12	12
Carpenter third rate		10	10
Bricklayer first rate	10	15	15
Bricklayer second rate		12	12
Bricklayer third rate		10	10
Sawyer [probably a pair]		15	16
Palanquin bearer	6		
Cook	4		
Water bearer	4		
Servant	4	5:10	
Female servant		3:8	3:8
Boy [servant?]		3	2:8
Labourer	3:12		3:12
Female labourer	2:12		2:13
Boy [labourer]	1:12		2:13

Source: Green (1852, p. 133).⁷⁶

Literature at Poonah College'.⁷⁷ He provides a comparison between wages in Poonah at the end of the 18th century, and the beginning and the middle of the 19th century (see Table 6.31).

Green (1852, pp. 134–135) observes:

The prices of labour have remained wonderfully constant for upwards of three quarters of a century, in spite of great fluctuations, and even great permanent changes in the prices of food; custom, the regulator of so many things in India, although

powerless over the prices of commodities, yet ruling the labour market almost absolutely, as it does, with us in England, the fees of lawyers and physicians. If we now ask whether we are to rejoice or lament over this low range of prices, the answer will depend very much on the class of interest with which we happen to sympathize.

Green himself does not hide on which side his sympathies are:

The labourer who obtains the same wages as formerly, and spends almost the whole of them on the produce of the country, which produce is at half its former price, is of course virtually twice as rich. And, indeed, the general result of our *regime* is the elevation of the lower classes, and the depression of the higher. A Duftedar, the chief native revenue officer in a province, and a village low caste watchman, although still greatly different in social estimation, are, undoubtedly, much more nearly on an equality than they ever were before. Our Government is emphatically the friend of the poor, and the deadly enemy—not of a commercial or manufacturing aristocracy, whenever that shall arise—but of the old land-revenue-consuming, fighting, and ruling aristocracy.

His evidence, however, is rather thin. He provides only annual grain prices for the years 1837–1852 and omits the year 1846 when there was a ‘very unusual drought’. In fact, much more solid price data for the Deccan and for India as a whole don’t support his optimistic view for the first half of the 19th century as a whole (de Zwart & Lucassen, 2020; Divekar, 1989a, pp. 45–49; Divekar, 1989b).

Divekar (1989a, p. 39) concluded from his study of prices and wages that ‘the general wage structure and different remunerations to different types of workers remained almost the same throughout the period. This was probably not peculiar to the Pune region or even to Maharashtra.’ It is not possible to accept this conclusion in the general form in which it is stated. Grain prices underwent very sharp fluctuations from year to year. Soil fertility and labour productivity must have varied significantly between arid Ahmednagar, where the Sykes’ data originate, and the relatively wet Pune region, captured in the Peshwa archives records. It would be surprising to see these variations impart no

effect on money wages at all. A comparison between Ahmednagar and Pune would suggest that spatial variations did exist, but these variations remained small, and given the somewhat higher grain prices in Pune, possibly reduced even further in real terms or their purchasing power. Sykes also made the observation that farm servant wages were almost never paid in money, but rather in an equivalent amount in grain. However, employers switched to money payments if grain was dear. The money wages that we observe, then, were the normal-year payments, and not the famine-year payments. It is possible, indeed almost a certainty, that money wages were not indexed nearly well enough. At appropriate prices of bajra (25–30 *ser* per rupee), the monthly wage of a farm servant in Ahmednagar in 1827 (₹2) translates into 6,000–7,220 calories per day, most likely for the entire household. Of course, the earners would not spend it all on cereals, so these figures do not reflect actual food intake, but they are a useful way to standardize the numbers.

For economic historians of India, the early colonial period, spanning roughly the period from 1818 until 1840, is of particular importance for several reasons. First, the start of a new property and fiscal system in the newly acquired territories in the Deccan induced an agrarian depression, a fall in price, and great stress to smallholders. Second, the scale of importation of English cloth into India sharply increased from the latter part of the time span, which should have caused distress to the textile artisans. The same circumstances, however, also increased the demand for cotton supplied by Indian peasants. Third, the change in regime from the Marathas to the British saw some forms of livelihood and labour markets disappear. The market for military labour or mercenary officers is a case in point (Divekar, 1989a, p. 49).

6.8. CONCLUSIONS

The main purpose of this chapter is to assess the significance of wage labour in India in the early 19th century, a period in which the economic impact of British domination was still much smaller than later on. Therefore, we need data on the proportion of the wage-dependent population. It has been demonstrated that, at least for the Deccan, also in the pre-census period (in India before

c. 1870–1880), it is possible to reconstruct LR for an entire regional population, though not without a number of difficulties, even if, as for the Deccan in the 1820s, excellent data like the published and unpublished studies of Henry Sykes are available. A careful analysis of Sykes' figures shows that the proportion of wage labourers in the total population did not change substantially over the 19th century and accounted for between 10 per cent and 15 per cent of the Deccan population (a percentage that is higher if taken from the total adult population or the total adult male population, of course); moreover, there may have been as many sharecroppers. By implication, we may confidently attach the same value to wage data for the early 19th century as for later periods, if collected according to the state of the art. A preliminary stocktake of real wages, given by Sykes, and compared to some other contemporaneous and later authorities, suggests that—contrary to Sykes' and Green's assertions—a long-term stagnation occurred from the late 18th to the mid-19th century. Further research is needed to differentiate between different types of income: those paid time wages in cash and kind, piece wages in cash and kind, sharecroppers and small independent farmers and weavers.

Appendix 6.1 Comparison of the Major Economic Texts on the Deccan by William Henry Sykes

BL, Report 1 (1826)	BL, Report 2 (1829)	Article 1838	Natural History Museum: William Henry Sykes Collection (1831)
1–20	1–80 Index & Glossary. Introductory Observations, dated 25 September General Geographical Description; incl. population returns in large and extensive tables (1825–1826) ⁷⁸	217–219 extent and physical circumstances; 261–270 population (incl. some comparisons with Java)	
21–75	81–296 district geographical description	253–261 civil divisions	
589–644	297–363 geology, incl. rocks, miner- als, earths	219–231	
[393–464 missing]	365–445 tenures	280–295 land and other tenures	
	449–520 assessments	310–320 assessments (including taxes)	
[not in list of contents; probably missing]	521–554 revenue	295–310 revenue (1827–1828)	

[89–392 missing: 89–100 agriculture, 101–112 implements of agriculture and irrigation, 113–160 cultivated fruits, 160–181 wild fruits, 181–280 field produce, 281–336 garden produce, 337–364 spontaneous vegetables, 365–380 grasses, 381–392 useful plants] ⁷⁹	557–568 agriculture	239–245 botany (including agriculture and gardening); 272–irrigation 274; 274–280 agriculture	Agriculture Book III (incl. implements, irrigation, production per yoke of oxen); Agriculture Book IV (sketches); Book IV (Fruits: cultivated and wild); Book V (Field Produce: Grains and Pulse); Book VI (grain yields, sugarcane mills)
469–488 weights and measures, 501–516 imports and exports, 517–532 transit duties, 533–540 markets	569–595 weights and measures	327–332 weights and measures; 326–327 transit duties	
541–544 coins	597–599 coins ⁸⁰	327 coins ⁸¹	
581–583 manufactures	601–607 manufactures	325–326 manufactures	
489–500 prices current articles 1–136	609–626 prices current	320–325 wages and prices (1814 and 1828)	
[missing here?]	627–637 wages		
573–580	639–650 education	270–272 education	

(Appendix 6.1 Continued)

(Appendix 6.1 Continued)

BL, Report 1 (1826)	BL, Report 2 (1829)	Article 1838	Natural History Museum: William Henry Sykes Collection (1831)
545–558 condition of the people; 561–562 cultivation, 587 cattle	651–665 condition of the people	[missing?]	
585–587 styles of building	667–670 styles of building	[missing]	
745–864	671–725 astronomical observations	[missing]	
	743–772 altitudes	[missing]	
645–743	773–1062 meteorology (incl. 210 pages of tables)	231–239	Meteorology regarding 1829
[77–88 zoology missing]		245–253 zoology	Zoology, richly illustrated
		332–333 army; 333 justice	

Source: Sykes (1838, pp. 320–325).

Appendix 6.2 Wage Relations as Exemplified by Sykes, 1825–1829

Sykes said, 'I made my inquiries on the subject of wages in towns and villages, the most distant from each other, to prevent the mistake of the adoption of local rates for those of different operations'.

Date and Place		Employer	Worker and Type of Work		Gender	Wage
Bhorkus, Powar Koreh, Mawuls, March 1825		Not given	Labourer		m (?)	₹9/76 or 2,842 pence per day
Mahloonga, Chakun Turruf, April 1825		Not given	5 <i>kunbis</i> who had neither cattle or implements of their own, from Neegoozmul, digging a well		m (?)	₹8/76 or 2.5 pennies or 8 paise per day without food
		Gubbuje Bhas, Brahmin and Oopurree (rentor)	Field labourer Chimma Maratha, meeresdar (hereditary landholder) of Mundvee, for the support of himself and wife		m	₹3 per month or nearly 7.5 paise per day
Neeroorsur, Turruf Owsuree, 29-12-1825		The thul (hereditary estate) of the <i>kunbi</i> family of Jangleea	Stout, middle-aged day labourer at a well, drawing water with 4 bullocks		m	1 ser of bajra daily or 2.5 paise daily or 2 shillings per month (the rate of the district)
Runjungaon, at the junction of the Beema and Mota Mola river, 26-02-1826		<i>kunbi</i>	Man from the neighbourhood of Sewapoor near the Katrass Ghaut, pulling up krdee in the fields		m	2 ser of jowar per day or = 3.7 paise per day or not quite 3 shillings a month

(Appendix 6.2 Continued)

Date and Place	Employer	Worker and Type of Work	Gender	Wage
Nandur, British Town in Ahmednagar C, March 1827	Not given	Yearly husbandry servants	m	₹12–20 per year plus food (a smart active man got about ₹15 per annum and supplied himself with clothes)
	Not given	Day labourers in harvest	m (?)	3 sheaves per day for cutting and 5 sheaves (or 2 ser of bajra) when he also ties up the sheaves and stocks them or 1.5 annas per day in cash. Maximum 5.5 pence per day
	Not given	Ploughing or harrowing from day light to night, allowing one hour for dinner	m	2 ser of bajra per day
Kanoor, jagir town in Ahmednagar C, March 1827	2 patels each	Permanent domestic servant	m (?)	₹15 per year plus food
				₹15 per year, food and clothing (value of 5 articles of wearing apparel is ₹3.5)
Dywuree, Ahmednagar C, November 1826	Cultivators	Day labourers harvesting	m (?)	5% of cut bundles or max. 4 ser of grain or ₹1/8 or 3 pence
Dytia Nuggur C, February 1827	Gosawee (religieux) who paid his people well ⁸²	Man fortunate getting such wage	m	₹25 per year, plus food and a blanket
		His son		₹6 per year plus food and clothes

Chambergoondeh (large town), Seendeh, Nuggur C, November 1827	Not given	Women weeding in fields from sun rise to sun set	f	₹1/16 per day or 1.5 penny
Kurkumb jagir town Poona C, December 1827	Not given	Husbandry servant	m (?)	₹12 per year, plus twice food per day but no clothes
		Cleverest gardeners assistant or ploughman	m (?)	₹25 per year plus daily food, no clothes
		Monthly servant (e.g., watching a field of grain)	m (?)	₹2.75-₹3 per month without anything in kind
Angur, Br town Poona C, 9-01-1828	[village]	2 village sepoy	m (?)	₹3 per month
				₹2 per month
Near Poona, 21-07-1827	Not given	Great number of women weeding in gardens, from day light until dark (high wages because of 'the paucity of field labourers in a great city')	f	6 paise per day or 2 1/3 penny per day

(Appendix 6.2 Continued)

Date and Place	Employer	Worker and Type of Work	Gender	Wage
Pait, jagir town in pargana Kheir, Poona C, 16-02-1829	Not given	12-14 men and women, 'poor people' from Owsuree town at 5 miles distance (they had therefore a march to make of 10 miles besides their day labour), pulling up a field of wheat	m	5% (the majority 4 sheaves per day; 2-3 men 5 sheaves per day or 4 seers of wheat 9 paise or 3.5 pennies per day; women 3 sheaves); NB 5 sheaves = 4 ser of wheat = 9 paise = 3.5 penny
			f	5% (3 sheaves per day)
Junnar city, end February 1829	Brahmin cultivating the Hubbus Baugh (80 bighas = 60 acres)	Harvesters of wheat and grain	m	5%
		50-60 women digging laboriously and tediously earth nuts	f	25%
		Cutting sugar, gathering fruit or vegetables (indeed wherever the produce was too valuable to give the labourer a share of it) from day light until dark, with an allowance of one hour for dinner	m	8 paise or 2.5 pennies per day
			f	4 paise per day

Source: Sykes (1838, pp. 320-325); D 144, p. 555-556.

NOTES

1. To put this in perspective: the non-working population had risen to 50 per cent in 2001, household work dropped substantially to 13 per cent, self-employment to 16 per cent, whereas wage labour had stayed more or less stable at 12 per cent.
2. Usami (2006), who concentrated on the Madras Presidency and Punjab provinces at district level from 1881 to 1921.
3. For a modern discussion of Buchanan's description of eastern Bengal 1798, see Schendel (1992).
4. For a preliminary version, see the parts on the Deccan in Lucassen and Stapel (2014).
5. Kulkarni (2006, Ch. 5).
6. IOR/Eur. Mss. D 140, p. 1; D 148, Introductory Observations, p. 77: 'I have not at any moment permitted the agency of intermediate persons, although I have always had a Karkoon at hand to prevent misinterpretations on my part, cautiously recording also only such matters as admitted of confirmation from various sources.'; cf. Sykes (1838, p. 320). He only needed an interpreter occasionally, for example, when visiting the 'Kanree-or Karnatkee-speaking' villages at the junction of the Beema and Seena rivers (their inhabitants also 'have diverging religious opinions'), see D 148, p. 52. As a rule, I do not change the spelling of geographical names used by Sykes; cf. Bhattacharya (1991).
7. IOR/Eur. Mss. D. 144, p. 557.
8. Sykes (1838, p. 218); partially accompanied by his wife, see IOR/Eur. Mss. D 148, p. 89.
9. Cf. the studies of Divekar (1989a, p. 2, 1989b), which are also partly based on these archives, starting in 1761.
10. IOR/Eur. Mss. D 148, p. 57.
11. Sykes (1838, p. 319); cf. IOR/Eur. Mss. D 148, p. 60 for the census returns of Ahmednagar collectorate in Marathi.
12. For Sykes as statistician, see also his references at the end of this chapter. For other English publications on the Deccan in these years, see Broughton (1809), Steele (1827), Junius (1838) and Green (1852).
13. IOR/Eur. Mss. D 148, 102. Cf. also his regular comments that the death rates compare well with the English ones (IOR/Eur. Mss. D, 97 about Turruff Baileh, Poona collectorate: 'the deaths are one in 45.38 persons, being nearly as healthy as in England'; IOR/Eur. Mss. D 148, 104 about Turruff Aleh in the same collectorate: 'deaths one to 51, being healthier than in England').
14. I have only been able to consult Choksey (1945, 1955, p. 25, 28, 36; where he mentions Sykes just briefly), and Choksey (1964, p. vi; a

pessimistic assessment of the possibilities of studying the economic history of the Deccan).

15. There is no mention of Sykes in Guha (1992, pp. 34–39; before Blyn).
16. Also called ‘the possessions of the southern jagheerdars within the political agency of Dharwar’ (D 148, 75), which consist of Puturirdun’s and other jagirs, Gunjundurghur jagir, Nizam’s jagir, Sawunt Waree territory and Sawanoor jagir.
17. All these data will be stored in a DB at the IISH: <https://collab.iisg.nl/web/labourrelations>. For the districts in the Ahmednagar collectorate, there is only information on agriculture, not on castes and professions.
18. Green (1852, p. 70; Pune under the Peshwas counted 200,000 inhabitants, now only 70,000–100,000).
19. IOR/Eur. Mss. D 148, 57–58.
20. For the preceding period, see Gokhale (1988), Fukuzawa (1991), Guha (1995) and Kulkarni (2006).
21. IOR/Eur. Mss. D. 148, census 1825/1826 per *pargana*, providing data on the following: houses (inhabited and deserted); inhabitants, subdivided into men and women and into ‘constituents of the population’; trades (subdivided into weavers, shopkeepers, ironsmiths, braziers, silversmiths, washermen, barbers, pot makers, carpenters, tailors, dyers, shoemakers and sweepers); stock (draught bullocks, pack bullocks, cows and buffalos, ploughs, carts) and, finally, schools; cf. Sykes (1838, p. 296).
22. Sykes (1838, pp. 265–267). Unless otherwise stated, the following information is based on this text. For a more extended version, see IOR/Eur. Mss. D 148, 45–52.
23. Sykes (1838, p. 272, 287–290); in 1797, there were 40,000 Brahmins in the Deccan, most probably heads of households, see Shirgaonkar (2010, p. 91).
24. IOR/Eur. Mss. D 148, 107–108.
25. IOR/Eur. Mss. D 148, 48. He probably means weavers.
26. IOR/Eur. Mss. D 148, 50–52 on measures to be taken to ‘protect the community from their violence’.
27. Sykes (1838, pp. 290–291); cf. IOR/Eur. Mss. D 148, 102–105 for the Ramoosees. More on the *Bhils* below.
28. Sykes (1838, p. 264); the Kohlees or Maratha mountaineers may possibly be considered as a subgroup, see IOR/Eur. Mss. D 148, 49–50.
29. IOR/Eur. Mss. D 148, 53.
30. Walker (2004, pp. 65–68) provides figures for Goa for the period 1791–1848. He points to systematic underreporting by the

Portuguese in order to fool the British authorities in Bombay; for slaves in the Deccan: Fukuzawa (1991, pp. 116–127); for India: Moosvi (2011, pp. 249–251).

31. For a proxy of their number in the 1820s as far as from African descent, see also Sykes (1838, p. 328) for ‘races’ (incl. Africans and their descendants).
32. Occasionally, he also refers to Muslims and Rajputs who have a predilection for the military.
33. Chaplin (1824, pp. 172–174): specification for the Poona division: Poona 3,786; Solapur 3,940; Shirur 330; Satara 1,870; Ahmednagar and Gungthuree 1,200. See for soldiers also Sykes (1838, pp. 285–286); for Abyssinian soldiers, called *Hubshees* c. 1700 (the Abyssinian slaves of the Emperors of Delhi), see Hutchinson (1855[1995]), Report 1818.
34. More extensively described in D 148, 48–49, 94–100.
35. Sykes (1838, p. 246, 261–263, 293; Ramoosees and *Bhils*, i.e., guardsmen); D 148, 54–56.
36. Sykes (1838, p. 161). However, we find the lowest birth rates in the Poona collectorate among Brahmins (1 in 57.29) and the highest among Muslims (1 in 40.80). Such religious/class differences warrant further research.
37. IOR/Eur. Mss. D 148, 55.
38. In Goa, Catholic men were allowed to marry at 14, and women at 12 (de Matos & Lucassen, 2020, p. 18).
39. For even more detailed age divisions in Goa 1839 and 1848, see de Matos and Lucassen (2020, p. 55).
40. Sykes (1838, pp. 270–272).
41. IOR/Eur. Mss. D 148, 47; cf. Sykes (1838, p. 263, 289; even Patels are frequently illiterate); cf. Sykes (1838, p. 317): ‘It is almost waste of labour to give the cultivator a note from government of what he will have to pay, as in nine instances of ten he cannot read it.’
42. Moreover, children of the *khyast* caste will also have attended school (Bellenoit, 2017).
43. Courtney and Auld ([1855]1995, pp. 39–40, 46); in 1853, 49 schools with 817 pupils from a total population of 152,206 persons (76,956 men and 73,109 women); for the previous year: Anderson ([1855]1995), pp. 148–149).
44. Sykes (1838, pp. 238–239, 263–264; death rate in the 32 turruffs or ‘hundreds’: 2.67%; in Ahmednagar city 1828: 1.82% without and 2.84% including cholera; in a 1000-men strong natives regiment, 0.85%). This all compares favourably with Europe.
45. *Apait* is a weekly market (modern spelling: *peth*), see Shirgaonkar (2010, pp. 38–41).

46. According to Shirgaonkar (2010, p. 38), the 1830 census provides houses per pait. I have not been able to verify this.
47. The *pargana* Nasik counted 71,581 inhabitants (Sykes, 1838, p. 257).
48. Future research might also take into account the number of persons paying the typically urban *sahyer* tax (see Tables 6.14 and 6.15).
49. We may possibly equate them to the 'Oopurrees or renters' in some of Sykes' texts.
50. Sykes (1838, p. 261, 308) mentions the production of 'little more than coarse sahrees for women and common tent cloth' because 'the European importers of cotton can afford to undersell the native manufacturers', but in reality all imports were from India, see Sykes (1838, pp. 325–326) for the import of turban cloths from the Nizam's territories, Scindia's dominions and Malwa; loin cloths from Malwa, and from the territories of the Nizam, the Holkar and the Rajah of Berar (Nagpur), etc.
51. I opt for half, though the table indicates more. However, some of the so-called *Bara Ballooteh* occupations must also have been rural (see Table 6.20, which suggests that in Poona collectorate, the *Bara Ballooteh* represented about 40% of agriculturalists). This estimate concurs with what we know of Ahmednagar city (Table 6.13).
52. Cf. Sykes (1838, p. 272) for Gujarati shopkeepers, who also keep their accounts in their own language.
53. For important comparisons with the earlier tax burden, from the Mughals onwards, see IOR/Eur. Mss. D. 148, 113.
54. According to Sykes (1838, p. 295, 317), 'The two principal heads of Sahyer are Mohturfa, properly "Arhan", or taxes on shops, houses and professions; and Bullooteh [...] the threshold is called Oombraputtee, from Oombra, threshold: it is generally a rupee per house.'
55. According to Sykes (1838, p. 290), 'in village papers there is a want of uniformity in the classification of extra cesses, sometimes articles being placed under the heads of Sahyer, which bear upon the land, and others again being classed with the land which are money commutations for labour' (for more interesting details, see Sykes, 1838, pp. 319–320). As Ahmednagar has the highest land revenue (Sykes, 1838, pp. 295–296), a substantial part of its *sahyer* might be hidden there.
56. Cf. Shirgaonkar (2010, p. 70): Nanded in the Deccan was known for the manufacture of turban cloth.
57. On the guild-like organizations mentioned here, see also the function of Sheteh: 'the person by common consent admitted to be head and spokesman of the mercantile and trading classes [...] he is

- of some importance in the districts [...] in regulating prices. [...] assisted by the Mahajun, which properly means a banker.'
58. According to Courtney and Auld ([1855]1995, p. 11, 45), 'the country does not yield sufficient for its own consumption, and grain of all kinds is annually imported from the Deccan in large quantities.'
 59. Cf. Shirgaonkar (2010, pp. 66–67) on the *paitanis* from Paithan on the north bank of the Godavari River and the oldest city of the Deccan: famous for both its silk and cotton fabrics, especially sarees. Maheshwar is another textile centre.
 60. For Burhanpur textiles, see Shirgaonkar (2010, pp. 65–71).
 61. Sykes (1838, p. 299); cf. Sykes (1838, p. 302): in Dharwar, 'the manufacturers, and in particular the weavers, exceed those of the other collectorates in the ratio of 100 to 11, or 89 per cent.'
 62. To give one example, we know almost nothing about the transport sector, see IOR/Eur. Mss. D 148, 13–16; Sykes (1838, p. 256) on river transport (sea transport does not apply, but see Kulkarni (2006, Ch. 4); on road transport by pack bullocks, see Sykes (1838, p. 280).
 63. Green (1852, p. 103) states that there was a greater demand for servants among the elites under the Peshwas than later under the British, also because the latter were emulated by the Indian elites:

a native Rajah or Jaghirdar would spend his income on crowds of retainers and hangers on of all kinds, creating a large demand for bajree, jowaree, ghee, and goor [...] swarms of brahmins hanging around them, and the suwars, peons, ghorawallas, and the troops of idle servants, to whose maintenance their revenues had hitherto been devoted.
 64. DB; Sykes (1838, p. 266) working with the same figures arrives, for obvious reasons (by not deducting the urban shares), at somewhat different figures, except for Dharwar (53%, which I cannot explain). He also mentions 41,948 cultivators in the Ahmednagar collectorate who are not mentioned in his British Library manuscript.
 65. A small number of Brahmins may have been cultivators themselves (IOR/Eur. Mss. D 148, p. 46: 'their numbers are too low, materially to allow its accuracy'); cf. Green (1852, p. 61).
 66. Cf. Table 6.2: on average, 60 houses and 270 inhabitants per village; in 16 villages along the highway, on average 70 houses and 4 shops were found (Clunes, 1826, pp. 9–11, 18).
 67. I have to admit that this does not remove all the problems arising from the reconstructed 5,000 'other' heads of household as shown in Table 6.2. Even if we shift, hypothetically, 5,000 *Bara Ballooteh* occupations from the countryside to the city we are left with 10,000 'others', that is, tenant farmers and agricultural labourers in the plains of the Poona collectorate. This is only realistic if the majority

of the 35,000 cultivators of this collectorate lived in the hills. This is not impossible but may only be confirmed by future research into the geographical conditions of this area, as Sykes does not provide any direct information on this point.

68. Sykes (1838, p. 274, 276–277) on women's domestic work.
69. IOR/Eur. Mss. D. 143, 489–500; cf. Sykes (1838, p. 273 [rice]); for exports of grain to the small Sawunt Waree State, see Courtney and Auld (1855, p. 45).
70. Sykes (1838, p. 274 about marketing grains; p. 254 inhabitants Goreh, p. 314 exports of chillies from the Mahloongeh Turruff, Poona collectorate, into the Konkun); IOR/Eur. Mss. D 143, 534–536 (market Goreh).
71. IOR/Eur. Mss. D. 144, pp. 554–556; 149, 626–637; cf. Sykes (1838, pp. 320–325).
72. IOR/Eur. Mss. D. 149, 627–628; cf. also 633.
73. IOR/Eur. Mss. D 144, 557–558.
74. Cf. in Appendix 6.2: the high wages considered appropriate by a 'religieux' with what average employers pay.
75. I assume that the high sums are for a pair of sawyers.
76. The 1775–1804 data 'is framed from the old records of family expenditure of a private gentleman, named Trimbeck Hurri Vurtuck'; the 1798–1820 'is taken from the Nirukh papers of the Peshwa's Dufter'; the annual prices of bajree and joaree 1837–1852, which he gives were 'furnished by some native friends, grain dealers in Poonah'.
77. Green (1852, pp. 133–135); on him, see Kulkarni (1989).
78. Per pargana the following data: houses (inhabited and deserted), cultivators and their lands in bighas (fields, gardens, waste), inhabitants (males and females; Brahmins, Rajputs, Shudras, low castes, Musalmans); trades (weavers, shopkeepers, iron-smiths, braziers, silversmiths, washermen, barbers, pot makers, carpenters, tailors, dyers, shoemakers, sweepers); stock (draught bullocks, pack bullocks, cows and buffalos, ploughs, carts); schools.
79. This lost section may well be covered by the MSS in the Natural History Museum, not yet studied by me, for example, ms. no. 6 on 'plants, animals and agricultural implements', and ms. no. 7 on 'economic plants'.
80. IOR/Eur. Mss. D 148, 127: detailed information on the Allee Baugh Rupee, which is 6 per cent less than the Ankoosee.
81. 'It is unnecessary to enumerate these coins, as they are in the Bombay Almanac'; idem p. 305: The Poona mint pays ₹3,301 taxes in 1827–1828, p. 327 (production of ₹, half ₹ and copper paise); Cf. Maheshwari and Wiggins (1989).

82. Cf. Moosvi (2011).
83. Cf. also Appendix 6.1.
84. Six pages of statistics extracted from the second report and a short note.
85. Also published as a separate book (Richard and John Taylor, 1838; also in *Madras Journal of Literature and Science*, 9, January–June 1839).

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- Second report on statistics of the Dukhun, signed by W. H. Sykes, Major, Officiating Statistical Reporter to Government, Poona, 25 September 1829 (LXXX 1064 pages).

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CONSTRUCTION WORKERS, REMUNERATION AND WELFARE LEVELS

An Indian Region during the 1860s

Dhiraj Kumar Nite

7.1. INTRODUCTION

The comparative discussion on the emergence of modern international inequality in welfare levels of peoples inhabiting the old civilizations in Asia and Europe, known as the great divergence, has enriched our understanding of world history in the last two decades. The scholarly findings related to the onset of the great divergence, that is, Asians falling behind and Europeans surging ahead in living standards, rates of growth and productivity, remain varied. Some scholars locate this beginning in the early 19th century (Pomeranz, 2000, 2005; Parthasarathi, 2011; Sivramkrishna, 2009; Yazdani, 2017), while others identify it at the turn of the 18th century (Allen et al., 2011; Broadberry et al., 2015; de Zwart, 2016; Williamson, 2011; Vries, 2013, 2015). The time frame covered spans until the third quarter of the 19th century, when the downturn in the economy in the Indian periphery halted and began to expand.

In the discussion, the issues of work, wage, prices and consumption *inter alia* occupy analytical importance. Some socio-economic developments defined the period of the 1850s–1870s in Indian historiography. Kerr has argued that the advancement of railway construction in this period led to the emergence of labour markets as well as the integration of labour markets. This development was conducive to the fact that Indian workers could regain the bargaining power in the economy, which they had lost in the first half of the 19th century (Kerr, 1997b, pp. 125–26; 2007, p. 39). Some other scholars highlight a similarly optimistic view of the beginning of a turnabout in the Indian economy, implying the recovery of per capita income as a whole and real income of the productive classes (Allen, 2007, p. 24; Broadberry & Gupta, 2016; Roy, 2016).

Focused on the trend of growth, Roy argues that ‘levels of living’ improved in both India and the West during the 19th-century modernization, whereas inequality in domestic consumption may have increased in both places (Roy, 2011b, p. 30; Williamson, 2011).¹ My chapter pays close attention to one of the episodes of the narrative of recovery and growth. It elaborates on the import of the new bargaining power and wage gains secured by construction workers for their living standards and how they managed this during the 1860s.

The chapter demonstrates that construction workers in the Deccan, present-day Maharashtra, in southern India during the 1860s, saw an improvement in real income. Notwithstanding this, the earnings of manual workers fell short of the cost of their family budget. Measured in the ‘subsistence ratio’—the ratio of the total income to the cost of subsistence basket of manual labourers—it was still below the unity of one. Welfare levels of workers in India were indisputably far lower as compared to that of their counterparts in Britain during the same period. To come to terms with the meagre ratio of family subsistence, these labouring poor sought to secure an income sufficient for basic household subsistence by increasing the supply of total family labour in the labour market. Women and children, however, received a wage increase far below that of their male colleagues.

To manage the family with the insufficient income, workers calibrated the household budget and thereby maintaining the levels of comfort itself ‘low’, depressed and deprived. To meet the

pressure of deprivation, they relied on the payment of advance from prospective employers and loans from the moneylender. Such economic transactions led them into a condition of labour dependency, which had an adverse effect on the scope of mobility and welfare returns available to workers. Finally, the study also observes that the working families, who collectively earned over and above the subsistence income, tended to free themselves over time from this vicious trap of performing as attached labour.

7.2. CONSTRUCTION WORK

The first all India census was carried out in 1872–1873. It set the number of ‘labourers’ to 12.3 per cent of a total population of 238.8 million, and it estimated construction workers as 0.9 million.² One decade earlier, in 1861, the construction of railways itself employed over 250,000 men, women and children (Kerr, 2007, 23). An average of 150 workers was engaged on each mile (1.67 km) of railway line under construction in 19th-century India. This average included those who were engaged in bridge construction, tunnelling and plate-laying. There were, however, significant seasonal variations in daily employment levels, where the work was most intensive during the winter months when bridge-building and brickmaking peaked. Depending on the landscape through which the line passed, between one and five miles of railway track got built in a month (Derbyshire, 2005, pp. 278–79).

One of the leading scholars of construction of the railways in India, Ian Kerr, has lamented the paucity of wage data for the study of the economic condition of railway-building workers.* Kerr considers that the railway companies usually hired the labour agents to recruit, supervise and distribute wages among construction workers. The paysheets of these labour recruiters did not mostly make their way into the known archives (Kerr, 1997, 2007). My study uses the documents, including paysheets, contract papers and daily diaries of one of the subcontractors, Joseph Stephens, who executed construction projects in the Deccan region in India during the 1860s.

* Refer to Map (at the end of the Chapter) for a depiction of the spread of the railway network in India in the 19th century.

The workers of our enquiry into the region where Joseph Stephens worked as a subcontractor on the Greater Indian Peninsular Railways (hereafter GIPR) were engaged mainly in the construction of railway structures between Egatpoora (Igatpuri) and Duskheda covering about 211 miles and between Bhusawal and Budnera, which was close to 149 miles. The railway structures included railway tracks, bridges, culverts, railway stations, engine pits, fences, water tanks and other railway buildings. These workers were also engaged in the construction of four cotton press and ginning factories in Amravati, Akola, Shegaon and Khamgaon.

The construction workers in Stephens' accounts performed various tasks. Both adult and experienced workers and the adolescent, inexperienced and aged workers were classified as the coolie (or 'cooly' in the accounts). Their gang-headman had been listed as *muccadam*. The same division as for the coolies was applied also to the masons and their headman was titled *mistry*. The accounts also included carpenters and blacksmiths. In addition, we find cartman, housekeeper, horse keeper, *ramosy* (guard), *carcoon* (clerk), a writer who kept attendance and accounts, and the inspector who acted as a manager. The class of coolies also included workers who were classified by their caste identities, such as the *Nowguna*, *Tapkir*, *Sopkar* and the *Baggarie*. The *Gaundis* worked as masons.

We get a better sense of the occupational and social composition of the workforce from the paysheet that was used by Stephens, who employed them in September 1862. They worked on the construction of two viaducts, one at Ulusana (now: Alasana) and Jullumb (Jalamb). The 435 workers had been listed under 16 categories, representative of such work.

- 04 *mistry*,
- 53 masons,
- 02 watermen,
- 10 *Muccadum*,
- 24 *Tapkir* (tobacco cultivators from Khandesh),
- 91 *Nowguna* (cotton cultivators and packers from Dharwar),
- 80 Coolies,
- 13 Boys,

05 Storekeepers,
07 Blacksmith,
01 Carpenter,
61 Drillers,
72 Women,
01 Nightwatchman,
09 Cartmen,
02 *Guntun* and *Batta* (weighmen).³

Women constituted about 16 per cent of the total workforce, over 25 per cent of the total coolie labour force (including Coolie, *Tapkir* and *Nowguna*) and nearly 48 per cent of particularly the coolie. The boys formed less than 10 per cent of the coolie and 5 per cent of the total coolie labour force. A possible reason for such a low percentage of children was the practice of calling a boy from age 15 a 'man', and a girl from the age 13 a 'woman'. Only those below the cohabitation age of 13 were counted as children.⁴ Certification of the age was conspicuous by absence. The all-India census shows an adverse sex ratio of 940 female per 1,000 male. Very few girls were occasionally listed in the paysheets. It indicates that, unlike boys, girls shouldered the responsibility of kitchen and household work as well as minding toddlers.⁵

The preceding occupational and social composition differed on the sites of earthmoving, ballasting and plate-laying. Earthmoving and ballasting were generally subcontracted to the native petty subcontractors. Ismael Hakem, Khader Shaik, Chimma Patel, Khadar Bhoj and Hunmmanta Cowjee were noted down in Stephens' accounts. Their names indicate that they were Muslim, Hindu as well as Parsee; they belonged to the well-off echelon in the respective communities. Mostly coolies were engaged in earthmoving and ballasting. For these heavy 'unskilled' tasks, women and children formed nearly half of the total labour force.

The workers' paysheets allow us to compile the data of workers' earnings. By adjusting the money wages for prices of the subsistence basket shared by workers, we get the trend of real wages. The labour market was not fully integrated in the 1860s. This means that the workers received different wage rates from the same employer and for the same type of work at different worksites. Also,

prices varied in the different markets of food grains and clothing: the two essential items forming the workers' subsistence basket.

Workers on the new construction sites received wages in cash. It was unlike the custom of payment in both cash and kind made to rural labourers. The paysheets indicate that most of these construction workers received monthly wages. They generally received advance money, in the order of one-fifth to one-fourth of the total expected monthly earning of a worker, upon recruitment and *cherimerry* (cash gift) during the working month. Such advance was to a large extent adjusted in the worker's wage-income at the time of monthly payment.

The payment of wages differed along the lines of skill premium, profession, gender, age, experience as well as the social identity of working persons. The wage tables (Tables 7.1–7.3) show below that among male manual labourers, customarily called the coolies, the wage rates varied to the tune of 14–43 per cent between the coolie 1, that is, adult and experienced, on one side, and the coolie 2, that is, the young, aged and what Stephens described as the 'lazy', on the other.

Between men and women, wages differed in the range of 33–57 per cent, known as gender wage gap.⁶

The wages paid to *Nowgunas* and *Tapkirs* were substantially higher than that of experienced coolie men. A twofold reason could explain this wage differentiation among manual labourers. *Nowgunas* and *Tapkirs* were the migrants from, respectively, Dharwar and Khandesh regions. They could have charged a higher rate to cover the costs of migration and a temporary stay in thatched huts close to the project sites. They would have negotiated a wage rate that would be in accord with their social identity of, respectively, cotton workers and tobacco cultivators, thereby keeping them socially superior to the coolies who were accorded degraded status.⁷ This particular kind of segmentation in the labour market of native labourers was short-lived and was not noticeable in the later 1860s.

The *muccadam* invariably received a wage of nearly two-thirds higher than his gang persons. He acted as a labour agent or middleman for subcontractors. He was responsible for the actual recruitment of coolies on behalf of subcontractors, daily mobilization of coolies and the frontline supervision on the worksites.

Two other factors contributed to raising his total earnings. The paysheets reveal that advance money paid to individual gangers was frequently let unadjusted with his monthly earning; it is not captured in the wages tables below. At the same time, paysheets show that he worked for 26 to 30 days in a month, whereas the rest of coolies worked on average for 24 days a month.

Notably, construction work took place on all days. Workers themselves choose to rest on Sundays; hence, the latter became unpaid weekly holidays.⁸ The same scenario occurred on a day following the date of the monthly payment. The cartman was the only group working on all six days in a week, hence 26 days a month. All of them worked from sunrise to sunset ranging from 10 to 12 hours a day, regularly enjoying breaks for breakfast and lunch at the work sites. They absented on the occasions of festivals, including Dussehra, Diwali, Holi, Nagpanchami (half-day leave), Eid and Muharram. We do not, however, know whether all workers—irrespective of their religions—celebrated all Hindu and Muslim festivals! They took breaks from the work schedule to meet other familial calls and bore interruptions caused by sickness, monsoon shower and storm. During the monsoon months of July and August, workers had lost nearly 50 per cent of the typical workdays.⁹

Among masons, the *mistry* (gang-headman of masons) was the counterpart of the *muccadam*, excepting one feature that the difference in wage rates paid to the *mistry* and masons was not more than 40 per cent at its best.

Wages paid to masons and manual labourers, described as unskilled coolies, showed a substantial increase since September 1862. This increase exceeded the price index. Hence, real earnings (purchasing power) of workers rose. The increase was the maximum, in the order of 8 per cent–12 per cent of compound annual rates of growth in real wages, for male coolies and masons during 1861–1868. Moreover, the grade two of coolies and masons received the highest increase. It hinted at a higher demand for relatively lower paid employees. It could also imply that the grade two of employees benefited from the gains of skill made on work and sought commensurate returns to their improved skill.

The enhancement of wages, I have suggested elsewhere, occurred amid circumstances responsible for wage revision (Nite, 2018, 2019).

Table 7.1 Wages (₹. – As. – Pies). (₹ = 16 As) (1 As = 12 Pies)

Year	Manual Labourer								
	Coolie 1		Coolie 2 (Adolescent, Aged, Inexperienced)			Women & Boys		Muccadam	
	As/Day	₹/Month	As/D.	Rs/M.	As/D.	₹/M.	As/D.	₹/M.	
1830–1850	2,67	4	2	3	1,33	2			
1861–August 1862	3	4,50	2,5	3,75	2	3,00	5,5	8,94	
Sep–Dec 1862	5	7,50	3	4,50	3	4,50	8	13,00	
1863	4,5	6,75	3,5	5,25	2,5	3,75	10	16,25	
1864	6	9	5	7,50	4	6,00	9	14,63	
1865	7	10,50	4	6,00	3	4,50	12	19,50	
1866	6	9	5	7,50	3	4,50	13	21,13	
1867	7	10,50	4	6,00	3	4,50	12	19,50	
1868	7	10,50	6	9,00	3	4,50	12	19,50	

Table 7.2 Wages

Year	Skilled									
	Mason 1					Mason 2 (Adolescent, Aged, Inexperienced)				
	As/Day	₹/Month	As/D	₹/ M	As/D	₹/ M	As/D	₹/ M	As/D	₹/ M
1830–1850	10	15					10	15	10	15
1861–August 1862	10	15	4	6			10	15	6	9
Sep–Dec 1862	14	21	6	9			14	21	9	13.5
1863	14	21	6	9			14	21	10	15
1864	14	21	10	15			12	18	10	15
1865	16	24	8	12			16	24	16	24
1866	14	21	8	12			16	24	16	24
1867	20	30	10	15			20	30	20	30
1868	20	30	10	15			20	30	20	30

Source: From 1861 to 1868, see Huseby Estate Archive (n.d.) and Huseby Estate Museum (n.d.). From 1830 to 1850, see Guha (1985, pp. 80–82), Divekar, ([1989]2008, p. 345). See also Allen and Studer (2009).

Table 7.3 Real Wages in the Base Price of the Monthly Subsistence in 1861 {MW/(Pt/Pb)}

Year	Coolie 1		Coolie 2		Women & Boys	
	As/D	₹/M	As/D	₹/M	As/D	₹/M
1830–1850	2.95	4.59	2.21	3.44	1.47	2.30
1861	2.43	4.50	2.02	3.75	1.62	3.00
Sep–Dec 1862	3.61	6.68	2.16	4.01	2.16	4.01
1863	2.95	5.47	2.30	4.25	1.64	3.04
1864	3.35	6.21	2.79	5.17	2.23	4.14
1865	3.88	7.18	2.22	4.11	1.66	3.08
1866	3.28	6.08	2.74	5.07	1.64	3.04
1867	4.30	7.96	2.45	4.55	1.84	3.41
1868	4.36	8.07	3.73	6.91	1.87	3.46
Compound rates of growth (CGR) of real wages during 1861–1868 [$(V(tn)/V(tb))^{1/(tn-tb)} - 1$]						
		8.69		9.13		2.05

Note: As/D = Annas per day; M = Month; ^ = log.

The construction of railways in India during the 1850s–1860s took place under the arrangement of state-guaranteed return of minimum 5 per cent on private investment (Kerr, 2007). This enabled the construction contractor to come up with the payment of relatively attractive wages for timely execution of the project. The 1860s saw the massive expansion of cultivation of cotton in the Deccan and wheat in Central India. The cultivation of these cash crops involved a labour-intensive and labour-absorbing method (Baker, [1993]1998; Guha, 1985).

The construction industry competed with this development in agriculture to attract labour for their project, which remained equally labour-intensive and labour-absorbing. Employers like Joseph Stephens additionally adopted the wage policy of pecuniary incentive offered to his working gangs to secure an efficient, proper performance (Nite, 2018).

The workers' material conditions rested partly on their ability to bargain collectively for improved wages. The wage levels they

Table 7.4 Real Wages in the Price (Pb) of the Monthly Subsistence in 1861 (MW/(Pt/Pb))

Year	Mason 1		Mason 2		Blacksmith		Carpenters		Writer
	As/Day	₹/Month	As/D	₹/M	As/D	₹/M	As/D	₹/M	
1830–1850	11.06	17.22			11.06	16.58	11.06	16.58	
1861	8.10	15.00	3.24	6.00	8.10	12.15	4.86	7.29	9.72
Sep–Dec 1862	10.09	18.69	4.33	8.01	10.09	15.14	6.49	9.73	15.86
1863	9.19	17.01	3.94	7.29	9.19	13.78	6.56	9.84	16.40
1864	7.82	14.49	5.59	10.35	6.70	10.06	5.59	8.38	11.17
1865	8.87	16.42	4.43	8.21	8.87	13.30	8.87	13.30	6.65
1866	7.66	14.19	4.38	8.11	8.76	13.14	8.76	13.14	10.95
1867	12.27	22.73	6.14	11.37	12.27	18.41	12.27	18.41	12.27
1868	12.44	23.05	6.22	11.52	12.44	18.67	12.44	18.67	18.67
CGR of real wages in 1861–1868									
		6.33		9.77		6.33		14.38	9.77

Source: Robertson (1905, pp. 10–86). The figures of prices are also adjusted from Allen (2007). See also Allen and Studer (2009). For cloth prices, see Roy (2011, pp. 22–23). For the food grain prices see Guha (1985).

Note: Pb = price in base year; Pt = price in time series; MW = Money Wage.

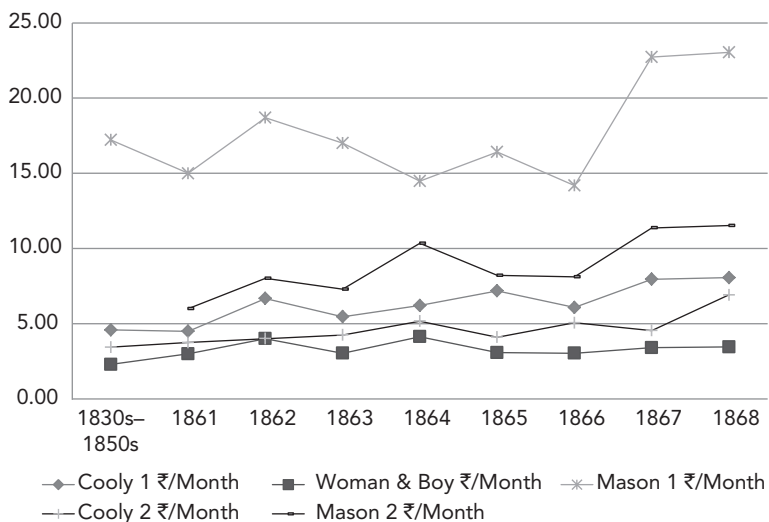


Figure 7.1 Real Wages in the Base Year of 1861 (the Price of Subsistence Living Basket)

Source: The author.

aspired for were set to match price changes and the household budget. Workers looked for a wage structure that would enable them to fulfil the respectable status of a male earner, whereas women and children were supposed to generate a supplementary income for the household. As a social custom, it precluded the articulation of any question of a comparable increase, leave alone an equal wage paid to women. The customary social nexus between caste, race and gender on one side and occupations on the other, it could be said, maintained significant wage inequality (Nite, 2019).

Women and boys received the smallest increase. It could indicate the abundant supply of them for the work of loading and carrying, within the rigidly gendered labour market. It could also have been an outcome of the belief that women and boys earned supplementary income for the family.¹⁰ To a large extent, it was similar to what Jha (2020, p. 90) observes in her study on the famine public (construction) works. The dietary requirements of men and women were differentiated on the basis of two parameters: the customarily sanctioned '*natural* or *inherent* differences between men and women', and the nature and quantity of work done by women.¹¹

An additional argument foregrounded itself in the assumption that metabolism differs between the male and female bodies, and thus the latter needs a lower level of nutritional intake as compared to that of her male counterpart.

The improved wage—incomes secured by construction employees fared favourably as compared to that of the agricultural and other rural labourers. The latter men earned in the range of ₹45–₹60 a year—₹4–₹5 a month and three anna a day—and that of women had on an average two anna a day, ₹3 a month and ₹36 a year in the 1870s. The earning of agricultural labourers was often on the lower side, though they usually additionally received some food and cloth from employers (Bates, 1985, pp. 585–587; Divekar, [1989]2008, p. 345; Guha, 1985, pp. 80–82).¹²

The increase in real wages secured by male construction workers directly hired by Stephens was more significant as compared to, for instance, the postal runners employed in the Deccan and Central India. The postal runners received from ₹5 to ₹6.5 a month during 1860–1870.¹³

The improvement in real earnings of construction employees during the 1860s confirms this historical description that the real income of working persons grew in the third quarter of the 19th century. Around this period, some scholars have suggested that working persons attained the same living standards which they had at the turn of the 19th century (Allen, 2007, p. 24; Broadberry et al., 2015, p. 62). This turnaround in real incomes of workers, however, was not sustained, despite a modest rise registered in GDP per capita, in the decades after the 1860s–1870s (Bates, 1985, p. 587; Broadberry & Gupta, 2016, pp. 22–23; Williamson, 2011).

7.3. WELFARE LEVELS

Now, we move on to ascertain what welfare levels workers were able to attain. One of its indicators is a ratio of the total annual earning of a person and the cost of his/her annual subsistence basket: what Allen has termed as the subsistence/welfare ratio (Allen, 2005). It is a narrow indicator of well-being; for an adequate indicator would cover social opportunities, workplace safety, ecological integrity, freedom of participation and creed as well as other sources of happiness.¹⁴ Here, the narrow indicator of well-being is drawn in relation

to the budget of subsistence basket to get a sense of the degree of improvement or suffering faced by workers.

Our estimate of annual earnings takes into account the method of payment and actual working days performed by workers. The methods of daily wage, piece-rate and task-based payment existed side by side. Workdays performed by the different occupational groups of employees, as indicated before, varied between an average of 24 and 26 days a month. The work year excluded the days away from the worksites on account of interruptions caused by monsoon, festivity and sickness; therefore, it appears to have been between 288 and 264 days. Additionally, employers frequently marked those workers performed half or three quarter on some days and accordingly calculated wages, while workers themselves considered such days as full workdays. The annual earnings of workers—wage rates multiplied by workdays—were in all likelihood, therefore, lower than what we have, for the sake of convenience, roughly calculated here.

The total household income of coolie families combined the earnings secured by both husband and wife, called family labour. Earnings of boys and girls are left out in our calculation, for their overall presence in the workforce was small.

The subsistence basket is drawn along the consumption pattern of workers (see Table 7.5). It is higher than the 'bare bones subsistence basket' as prepared by Allen and maintained by de Zwart in their comparative study of global inequality (Allen, 2007; de Zwart, 2016).¹⁵ It includes caloric intake on average of 2,480 per adult in the family, that is, 2,730 for an adult man and 2,230 for an adult woman performing 'moderate work', as recommended by the National Institute of Nutrition (Indian Council of Medical Research) since 1944.¹⁶ It included cloth consumption on an average of eight-yard per person, which was the national average of cotton consumption in the 1860s–1870s.

This subsistence basket of such consumption pattern is conservative for modern workers who would, as it were, consume and use tea, coffee, sugar, rice, furniture, footwear, hosiery and underwear, more clothes and spend on children's education, urban dwellings, books and newspaper, and entertainment (for details, see de Vries, 2008; Haynes et al., 2010; Nite, 2014). Undoubtedly, the customary

Table 7.5 Basket of Subsistence

	Quantity/Person/ Year	Nutrients/Day	
		Calories	Protein
Rice	93–120 kg	922.4–1190	19.3–24.9
Jowar	94–120 kg	778.8–994.2	28.3–36.1
Beans/g	13–19 kg	129.8–179.7	6.5–9
Meat	3 kg	21	1
Butter/ghee	3 kg	72	0
Sugar	2 kg	21	0
Salt	4 kg (11 g per day)		
Spice	2.88 kg (7.7 g per day)		
Liquor/beer			
Soap	2.6 kg		
Cotton	4–8 Yd		
House	5%–10% of consumer spending		
Lamp oil	2.6 kg (edible oil)		
Fuel	3 mill BTU		
Mat, cot, bedding, furniture			
Kitchen and eating utensils			
Medical care			
Education & apprenticeship			
Book, newspaper, library, museum			
Recreation & amusement			
Transportation & communication			
Total		1945–2478	55.1–71

Source: Adjusted from the table of Subsistence Income: Basket of Goods, India, prepared by Allen (2007, p. 23). See also Allen and Studer (2009). The figure of four- to eight-yard clothes replaces Allen's figure of 3-meter cotton cloth. The former is taken from the estimate constructed by Roy (2011, pp. 22–23). Jowar (sorghum) was the first-choice food grain among the commoners in 19th-century Deccan (Guha, 1985). For the figure of spice, see Srivastava (2017), Bhathal et al. (2020) and that of salt, see Maxham (2001) and Johnson et al. (2019).

subsistence necessities of the people, as both Ricardo and Marx noted, varies between civilizations and between classes within a civilization. It corresponds to the habits and scales of economic and 'moral progress of societies' (Marx, [1867]1976, p. 275; Ricardo, [1821]1975, pp. 94–94). A difference of wages with workers' moral sense of subsistence necessities influenced both wage bargaining and management of the actual household budget. Notably, our calculation of subsistence cost of a worker, indeed, remains significantly lower than what was considered appropriate for the prisoner in Bombay.¹⁷

The cost of the quantity of subsistence of a worker's family is based on this view that the family or household in 19th-century India (the Deccan) consisted of on average 4.5 persons. These families included 1.44 adult men and a lower proportion of women, given the skewed sex ratio of 134 men to every 100 women at the age of 12 and above (Guha, 2001, p. 55). The overall consumption size of a family would be 3.5 adults, for we assume that a child until the age of 12 would be equivalent to a 0.5 adult consumer (see Table 7.6).

The figures of subsistence ratios (Table 7.7) reveal that none of the coolies and the second-grade masons earned sufficiently to bear even the subsistence costs of their entire families during

Table 7.6 The Cost of Subsistence (₹)

Year	Person/ Day	Person/ Year	Person/ Month	Family/ Year	Family/ Month
1830s–1850s	0.058	21.16	1.76	74.08	6.17
1861	0.067	24.30	2.02	85.04	7.09
1862	0.075	27.30	2.27	95.53	7.96
1863	0.082	30.00	2.50	104.99	8.75
1864	0.097	35.23	2.94	123.29	10.27
1865	0.097	35.51	2.96	124.30	10.36
1866	0.098	35.95	3.00	125.83	10.49
1867	0.088	32.07	2.67	112.24	9.35
1868	0.087	31.63	2.64	110.71	9.23

Source: The data of prices are adjusted from Allen and Studer (2009). For the figure of household size in 19th-century India, see Guha (2001, pp. 107–109).

Table 7.7 Subsistence or Welfare Ratios

Year	Coolie 1			Coolie 2			Mason 1		Mason 2	
	Individual	Family	Family Labour	Individual	Family	Family Labour	Individual	Family	Individual	Family
1830s-1850s	2.08	0.59	0.89	1.56	0.45	0.74	7.80	2.23		
1861	2.04	0.58	0.97	1.70	0.49	0.87	6.79	1.94	2.72	0.78
1862	3.02	0.86	1.38	1.81	0.52	1.04	8.46	2.42	3.63	1.04
1863	2.48	0.71	1.10	1.93	0.55	0.94	7.70	2.20	3.30	0.94
1864	2.81	0.80	1.34	2.34	0.67	1.20	6.56	1.87	4.68	1.34
1865	3.25	0.93	1.33	1.86	0.53	0.93	7.43	2.12	3.72	1.06
1866	2.75	0.79	1.18	2.29	0.66	1.05	6.43	1.84	3.67	1.05
1867	3.60	1.03	1.47	2.06	0.59	1.03	10.29	2.94	5.15	1.47
1868	3.65	1.04	1.49	3.13	0.89	1.34	10.43	2.98	5.22	1.49

Note: Family = 3.5 adult equivalents (1.75 males plus 1.75 females). Family labour = One male plus one female.

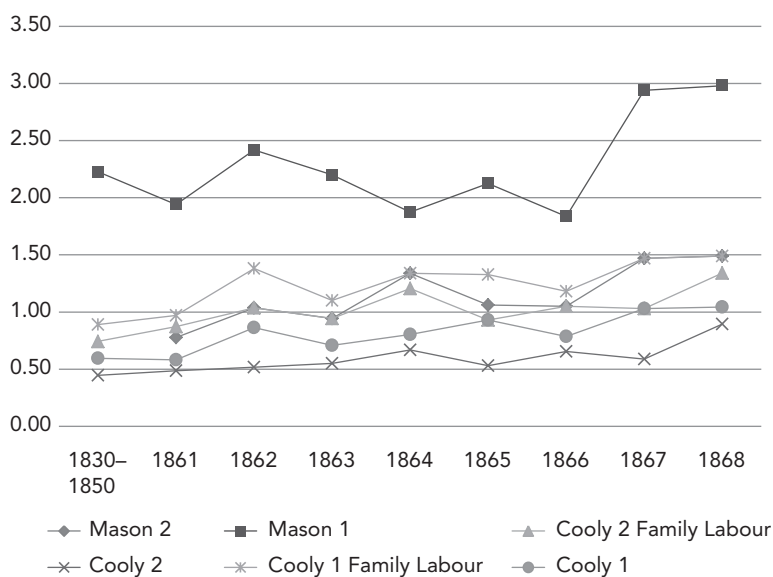


Figure 7.2 Subsistence or Welfare Ratios

Source: The author.

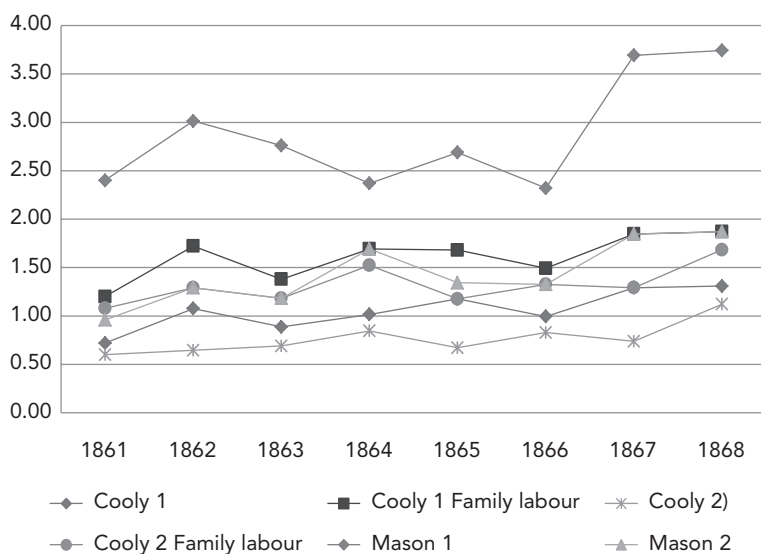


Figure 7.3 Subsistence Ratios (Bare-bane Basket of Subsistence)

Source: The author.

1861–1862. Since then, wage increases helped the second-grade mason to meet the prevalent social code of a respectable male earner in the artisanal community. By contrast, coolies deployed their maximum working members involving women and available children in the family for wage work, so as to secure a necessary household income. Consequently, the family–labour economy was prevalent among coolies.

Between Indians and British workers, both gained quite modest increases in their real wages in the third quarter of the 19th century. It marked a reversal in the preceding trends of fall and stagnation in both cases. Such gains thus led them to achieve standards of living that their counterparts had in the mid-18th century.¹⁸ Meanwhile, inequality in domestic consumption between the working classes and the rich surely grew in both countries. At the same time, inequality in consumption and welfare levels, as captured through subsistence ratios, between colonial workers and metropolis workers in two countries of the Victorian empire also increased. It surged further in the fourth quarter of the 19th century. The family subsistence ratio of building workers in Britain was over two, while their counterparts in India had less than one.¹⁹

Roy argues that an increase in the supply of labourers to the labour market was the reason why wages remained stagnant in the long run. The depressed wage, he continues, was not necessarily a welfare loss to the labourers' families. For the opportunities of employment for an increased number of labourers enabled many working families to utilize surplus labour gainfully (Roy, 2016, p. 192). Did manual labourers regret at their inability to attain a 'respectable' family life on par with masons? Or were they contrite about the presence of children on the work sites for either wage work or minding toddlers? We do not have any alternative standpoint of manual labourers. Nor do we have any alternative opinion of women on why they were unable to bargain for an increase in wages comparable to their male counterparts. Presumably, the circumstances of the 'insufficient' growth of per capita income in the national economy would have been the source of their difficulties and deprivation.²⁰

How did the labouring poor meet specific exigency and some contingency, such as the extra costs of marriage, festival, birth,

sickness, funeral and joblessness? Notably, rates of morbidity and mortality were extremely high, while the consumption of coarse food a regular feature (Baker, [1993]1998, p. 160). Among masons, those who were skilled, efficient and regularly employed appear to have managed with their saving from the wage income to sail through such occasions of significant expenses. Several other workers appear to have devised ways to keep the cost of their consumption at a minimum. They consumed more inferior and cheaper food grains, such as jowar (sorghum) and bajra (millet) than rice, wheat and pulses. Indeed, jowar cultivation expanded to meet the demand of the labouring poor (Baker, [1993]1998, p. 139). Their consumption of cotton cloth remained on average four yards per person, which was much lower than an all-India average of eight yards per person in the 1860s (Roy, 2011, p. 23). Their cloth consumption was as much as the barest involving a pair of loin cloths (dhoti) for men, and a pair of saris for women. Moreover, their preference for cloth revolved around the cheaper coarse cotton fabric (Baker, [1993]1998, p. 154; Roy, 2011, pp. 23–24). They walked and worked barefoot. They lived in houses that the census reporter described as the inferior sorts, constructed of mud and thatch. Migrant coolies and masons stayed in thatched huts put in place as a temporary shelter in the vicinity of worksites.²¹

These workers shared a lot with the image of ordinary cultivators. The social reformer, Jotirao Phule, critically commented on the neediness and anguish of productive classes, thus

The Malis and Kunbis labour in the fields and pay the taxes. They do not even get clothes to cover their bodies. Tiny little children tend the cattle. They have no shoes; their feet are bare. ...He has no time to learn anything; the father is in anguish. See, he blames the gods for his misfortune. (O'Hanlon, 2002, p. 214; Phule, 1869, p. 87)

The labouring poor adopted another means to seek the payment of advance and *cherimerry* from employers frequently. Besides, they borrowed from moneylenders-cum-gangers. The payment of advance was widespread among workers. They negotiated advance payment for recruitment, which was a small part of the payment that got adjusted with the monthly remuneration. Advance money was in

the order of one-fifth–one-fourth of the total expected monthly earning of a worker. In many cases, the old advance was rolled over to the next month. Parallel to this transaction, they sought *cherimerry* from employers. They received *cherimerry* on festive occasions and sometimes in the middle of a month. The festival related *cherimerry* were gifts of cash money, a goat and liquor bottle, called *baksheesh* (gratuity or charitable gift), and comparable to a similar custom prevalent between the landowner and the labourer in the agrarian society. However, *cherimerry* paid without any festive occasion in a month was supplementary to advance money, which employers usually adjusted in the monthly payment.²²

In a way, coolies and most masons were indebted to and thereby dependent on employers to afford their routine household necessities within the temporality of work and monthly payment. Loans borrowed from the *sowcar* (moneylenders), including the gangers themselves as well as the sizeable landowning village headmen, were directed at coming to terms with other contingency and exigency.

The life story of these workers appears quite close to those of small peasants who borrowed money from moneylenders and advance from planters and merchants for cultivating cotton, wheat, jute, indigo, groundnut, sugarcane, rice, jowar, pulses and tobacco. In return, they frequently contracted with them the sale of their produce at the prior fixed price, called future trading, or at the going price during the harvesting season. Additionally, they also visited them for credit and incurring the costs of social, religious and other exigency and contingency (Baker, [1993]1998; Banaji, 2010; Bates, 1988; Fukazawa, 2008, p. 194; Guha, 1985, pp. 75–78; Hardiman, 1996). Many of these cases of productive classes seem to have been close to the situation of what Breman calls ‘neo-bondage’, Ahuja terms ‘hireling labour’ and Banaji as ‘coerced wage labour (formal subordination of labour to capital)’ (Ahuja, 2013; Banaji, 2010; Breman, 2012). I have argued elsewhere that these kinds of economic transactions and attendant labour institutions had an adverse effect on the overall scope of mobility and welfare returns available to working people. Such a consequence was, in turn, one of the reasons responsible for depressed living standards (Nite, 2019).

One of the perspectives on labour practices and its connection with welfare returns to workers maintains that the enhanced welfare for the productive classes [in the latter 19th century] was a product of the marketization of labour as part of economic growth, labour mobility and a reduction in the transaction cost of labour power. The marketization of labour as part of the commercialization of the economy led to institutional change, that is, from the custom- and status-based employment arrangement to contractual employment. This resulted in a fall of transaction cost and was connected to labour mobility as well (Brodberry et al., 2015; Clark, 2007, pp. 240–262; Roy, 2011, 2016; Roy & Swamy, 2016, pp. 104–122; Swamy, 2016; Williamson, 2011). Notwithstanding this, the problem of the relatively ‘depressed’ standards of living of working people remained a noticeable fact.

The depressed standard of living of workers was a result, as explained by the foregoing perspective, of the combination of factors: such as excess labour, low productivity and imperfect or inadequate institutional setting of contract design and enforcement. Imperfect/inadequate institutional setting, such as the ‘tenancy laws’ were responsible for low productivity in agriculture; that the breach of contract act was responsible for a lopsided outcome of contract enforcement. This perspective also argues that the constraining and coercive institutions, such as penal labour act and breach of contract act were ‘a cruel solution to the contractual problem’ in the form of ‘opportunism’ of the working persons, without necessarily being injurious to welfare returns to working persons.²³

The above-mentioned viewpoint, it could be said, underestimates the coercive and constraining feature of many a contractual employment arrangement, and what ‘adverse’ effect it had on welfare outcome and labour mobility. Furthermore, it overlooks the root of an imperfect or inadequate institutional framework. One of its sources, it could be said, lay in the power structure implicit within the labour relations and, more so, the fact that it was preferred on the basis of its cost efficacy for surplus extraction geared towards maximization of profit, political stability and labour control. The connection between labour relations, the institution of contract enforcement and economic performance was never

frictionless, however (for an elaboration of some of these critical viewpoints, see Ahuja, 2009; Banaji, 2010; Behal, 2014; Breman, 2015; de Zwart, 2016; Hofmeester & de Zwart, 2018; Lucassen, 2007; van der Linden et al., 2014).

The coercive and constraining institution of labour control and contract enforcement, which was used by subcontractors on the GIPR, was an essential feature. It aimed at controlling labour recruits, their mobility, as well as their demands for enhanced welfare. Simultaneously, the subcontractors paid relatively attractive wage rates to workers to secure better labour efforts and specific performance. In this contractual system of employment, workers secured an increase in real wages. This calls for qualifying another perspective, which highlights the usage of a wide range of unfree, coerced and dependent labour for depressing the market-clearing wage of labourers (Joshi, 2009; Mohapatra, 2004, 2009). In railway construction during the 1860s, the use of coerced labour, on one side, and the policy of competitively attractive wage, on the other, were not mutually exclusive of each other (Nite, 2019).²⁴

In the case of the construction sector, transactions in advance and *cherimerry* functioned as a vehicle of labour recruitment, control and discipline in the hands of employers. This reduced from 1865 and disappeared altogether in 1868. In the period 1860–1864, it could be said that employers like Stephens succeeded in building a reliably dependent workforce, which no longer required an economic mechanism of further advance and *cherimerry* to attract workers to him since 1865. This kind of transaction was now limited only to the needy individuals and new recruits. In 1868, Stephens planned to wind up his construction business in India; therefore, he stopped making any more investment in the dependent workforce around him.²⁵ Since 1865, workers did not press for the continuation of such transactions, it could equally be said, because their improved wages, moderation in prices and the expanded scope of using family labour enabled them to meet the calibrated subsistence budget.

The depressed living standards and the deprived, vulnerable condition of well-being shared by most of the construction workers were connected with the practices of labour dependency and coerced wage labour. Such a labour practice was, in turn, a result

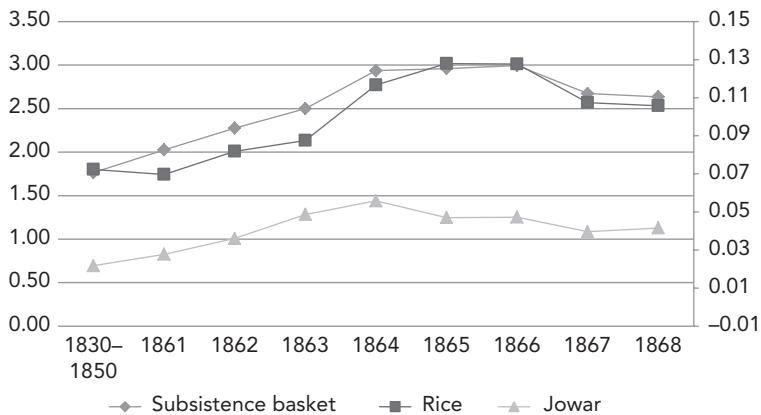


Figure 7.4 Price Trends of Subsistence Basket (Primary Axis) and Price Trends of Jowar and Rice (Secondary Axis)

Source: The author.

of the broader Indian poverty and the availability of labouring poor. The latter, in turn, was the victim of backwardness of agriculture, forming over 70 per cent of the economy, and the underdevelopment in general.

The macroeconomic context was an expression of the factors including resource abundance, low capital-labour ratio, the predominance of the rent-seeking agrarian elite, the stultifying effect of imperial preference and colonial, despotic polity.²⁶ The nexus between castes, gender and occupations restricted the democratization of remunerative occupational skill. Surplus extraction took place without revolutionization in the means of accumulation but through a perpetual use of labour-intensive performance. All these were the source of low productivity, depressed wage-income, high wage inequality and the custom of family labour. The efforts undertaken by the political society, namely colonial state, and its ruling echelon, were far from inclined to remove the ratchet. With a literacy rate of 3.3 per cent, life expectancy of 28 years in all India, 27 in the Deccan and 26 in Berar region, and sex ratio of 940 females per 1,000 males,²⁷ the human cost of the existing economic and political institutions and its function for the productive classes, is laid bare.

7.4. CONCLUSION

The focus on wages, prices and the living standards has led the discussions around the great divergence, resulting in varied perspectives. This chapter builds a new set of relationships between these variables. It describes the welfare levels of construction workers and their way of managing living standards in the expansive economy during the 1860s. It contends that the existing thesis that real wages and living standards grew in both Britain *and* India in the modernization 19th century needs to be reassessed.

Additionally, it juxtaposes workers' gains in wage income and bargaining power with their painful struggles at coming to terms with the unfavourable living standards. Consequently, the chapter qualifies the growth in real wages of construction workers in the Deccan by laying out the following: the subsistence ratio of manual workers, mostly remained below the unity of one and their earning fell short of the cost of family subsistence. The living standards of workers in India were lower in comparison with their counterparts in Britain. The labouring poor secured essential family consumption by increasing the supply of family labour on the labour market and agitating for wage revision. Here, women and boy coolies were far from receiving a wage rise comparable to their male counterparts. The labouring poor adopted strategies to come to terms with the meagre ratio of family subsistence. They calibrated the budget of household, thus maintaining the low levels of comfort itself.

To meet the pressure of depressed living and deprivation, they entered in the labour dependency grounded on the payment of advance and loan in return of the continuous supply of labour efforts to employers. This kind of economic transaction and attendant labour institution cast an adverse impact on mobility and welfare outcome available to working people. It is equally noticeable in this study that the working families who collectively earned more than their subsistence wage kept themselves from the vicious cycle of attached labour, indebtedness and low welfare levels. Thus, workers frequently took loans and advance; as soon as possible, they sought to get rid of such dependencies that limited their mobility in the labour market and their liberty at large.



Railway Map c. 1900

NOTES

1. A similar emphasis is discernible in Williamson (2011). Williamson's thesis is evidently weak as far as the Indian and Chinese peripheries were concerned.
2. The population of Indian territory directly ruled by the British was 190.5 million and that of whole of India was 239 million. See Waterfield (1875, p. 32) and Heston ([1989]2008, p. 396).
3. Huseby Estate Archive (n.d., File 1) and Huseby Estate Museum (n.d.).
4. Waterfield (1875, pp. 12–13). See also Guha (2001, p. 8, 106). Notably, the Indian Penal Code and Criminal Procedure Code of 1882 had regarded the age of 10 of girls for consent of sexual intercourse. The Age of Consent Act, 1891, raised it to the age of 12. However, the Factory Act, 1881, had prohibited the employment of the children below the age of 7, while children of the age 7–12 to be employed for nine hour a day in the 'perennial factory'.
5. Waterfield (1875, p. 13).
6. It meant that women's wage relative to men fell as compared to that of the late 18th century. See also de Zwart (2016, p. 170). For a similar gendered differentiation in wages on the sites of famine relief (construction) works, see Jha (2020, p. 80, 90–91).
7. The free artisans distinguished themselves from the bondsmen and coolie in 17th- and 18th-century India (Moosvi, 2011). Dhar notices that the artisan alongside the cultivator sought to be treated as respectable poor as against the coolie in the famine relief worksites in the later 19th century (Dhar, 2016).
8. The custom of Sunday worship offered to the local deity, the Vittola—Khandoba, was prevalent among the Deccan rural population (O'Hanlon, 2002, p. 153, 157, 162).
9. 'Diaries (1: 1860-61, 2: 1862 and 3: 1863) of Joseph Stephens', Joseph Stephens's India Collection, Huseby Estate Archive, Dagbok Volume FIf: 1, Linnaeus University. See also, 'Pay Lists' and Pay Sheets'.
10. On the gendered labour market and accumulation regime, see Mies ([1986]2014) and Mies (2014).
11. However, Jha (2020, p. 27) observes that women fared better than men during famines in terms of both mortality and relative wage.
12. Roy (2016, p. 190) presents a figure of ₹24 and ₹35 as annual income of the agricultural labourer in India, respectively, in 1857 and 1870–1875. An adjustment of this figure to the feature of the Western Indian economy where wages and prices were found somewhat higher than other parts of India will not yet match the

figure presented by Guha (1985), Bates (1985), and Allen and Studer (2009). Roy seems to underestimate, it could be said, the portion of wages paid in kind to agricultural labourers.

13. Robertson (1905, p. 289).
14. For a broader indicator of well-being, see van Zanden et al. (2014).
15. See also, Allen and Studer (2009).
16. National Institute of Nutrition and Indian Council of Medical Research (1998, p. 89, 117).
17. Prison costs in Bombay province in 1868 was ₹38.44 on food and ₹5.88 on clothing or total ₹44.32 a year. See Heston ([1989]2008, p. 455).
18. For the Indian scenario in the 18th century, see Broadberry and Gupta (2016, pp. 15–32) and Allen (2007, pp. 9–32).
19. For the British scenario, see de Zwart et al. (2014, pp. 73–84), Allen (2001) and Feinstein (1995, 1998).
20. A liberal estimate of Heston (2008, pp. 378–379) points out that for the period from 1860 to 1920, population grew by about 30 per cent and per capita income by at least 35 per cent, that is, under 0.5 per cent a year. Broadberry and Gupta (2016, p. 25) estimate that the growth of per capita income was negative during 1801–1871, with a modest and unsustainable turn up from 1841. Bagchi (2010, p. xxxiv, 1–12) maintains that there was little growth of per capita income, rather a fall by 25 per cent, during 1794–1900, that is, in 19th-century colonial India.
21. Waterfield (1875, pp. 11–12) and John Lumsdaine (1875, pp. 28–29). The better sorts of houses were usually masonry and tiled.
22. Stephens ('pay lists', 'Pay Sheets').
23. Stephens ('Pay Lists', 'Pay Sheets'). For a similar argument in the context of control on labour mobility through the institutions of labour agents, deferred payment and the payment of advances, see de Neve (1999) and Bates and Carter (2017).
24. Lucassen (2012) has similarly noted the function of a wage policy geared towards productivity-driven payment of a relatively higher wage to workers in the Ichapur Gunpowder factory in late 19th-century Calcutta.
25. Stephens ('Pay Lists', 'Pay Sheets').
26. The list of relevant studies is long. Among others, see Gupta (2019, pp. 803–827), Bagchi (2002) and Williamson (2011, pp. 75–100, 145–167).
27. Waterfield (1875, p. 13) and John Lumsdaine (1875, pp. 72–73, 194).

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WAGE PAYMENTS AND LABOUR PRODUCTIVITY

The 1896–1897 Famine in North-Western Provinces and Oudh*

Amal Shahid

The history of colonialism in India was marked by a history of famines. The Indian subcontinent in the second half of the 19th century suffered frequent scarcities, droughts and famines, intensifying particularly in the last decade of the 19th century. One of the main ways the colonial government gave relief to the famine-affected population was by providing employment on construction work for railways and irrigation works. Such employment on public works such as roads and irrigation systems as a form of relief was first attempted in India during the 1837 Agra Famine (Sharma, 2001). After the British Crown took over in 1858, the creation of famine commissions and Famine Codes sought to resolve the conflict of famine relief provision to the affected population and famine prevention in the subcontinent through employment of famine-affected population on public works construction.

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This chapter shows how colonial government attempted to manage labour productivity during famines. To assess levels of labour productivity in India in comparison with the West, historians such as Broadberry, Gupta and Clark have discussed wage rates for industrial labour in India from the late 19th century in relation to economic and cultural factors (Broadberry & Gupta, 2016; Clark, 1987; Gupta, 2011). These studies isolate labour productivity from the sociopolitical contexts in which labour was mobilized and recruited. This strand of literature is also in sharp contrast with the Marxist and post-colonial labour historiography that illuminates the role of the colonial state in affecting wages, such as by Mohapatra, Joshi or Kerr (Joshi, 2003; Kerr, 1995, 2004; Mohapatra, 2005). In both sets of historiography, the intermediary or a middleman, such as a subcontractor, jobber or recruiter, is accountable for substantial control over the wages and productivity of the labour in industries, that is, there is a supposition that institutional economic factors shaping labour markets were ‘traditional’, that is, they were carried over from the agrarian context and remained untransformed by the colonial state, such as pointed out in the works of Chakrabarty and Chandavarkar (Chakrabarty, 1989). As a result, there has been insufficient exploration of other causes of low productivity and wages in India. Through the famine labour case, I intend to show how the colonial state moulded the hitherto assumed culturally fixed position of the intermediary (Shahid, 2021) and its impact on labour productivity.

Estimates on labour productivity discuss at length the wages in agriculture as well as service and transport industry, but seldom take into account how a different context, where labour was already expected to be underproductive, can shed new light on wages and productivity. Famines provided the government a ready supply of labour in the form of an affected population in want of relief and willing to work for any wage, thereby enabling it to undertake public works at lower cost (Shahid, 2021). Therefore, in this chapter, I concentrate on famine labour to highlight the ways the colonial government through famine administration attempted to regulate productivity. In support of this argument, I demonstrate the government’s efforts to reduce wage costs and tie wages to

productivity, through a study of the intermediate system of relief provision in the North-Western Provinces (NWP) and Oudh during the 1896–1897 famine.

The famine relief system in general justified low wages to ensure that only the workers most in need of employment came to the relief works for employment. Under the intermediate system, the colonial state further sought to differentiate between the ‘productive needy’ and the ‘unproductive needy’ among the famine-affected population. This was a system of payment by results which, by keeping wages below subsistence level, aimed to exclude the extremely weak from those who could complete more construction work. This case suggests that those who produced profit for the colonial government were considered ‘able-bodied’, while the others were described as ‘inefficient’ (Alatas, 1977, p. 221). This approach to categorizing labour for enhancing productivity is tied to the concept of ‘waste’ discussed by Gidwani and Reddy with reference to British colonial land policies (Gidwani & Reddy, 2011). In their paper, waste was a term used to stress ‘bio/cultural’ differences between the colonizer and the colonized (Gidwani & Reddy, 2011, p. 1625). In the same vein, this chapter shows that in the colonial sources, ‘inefficient’ labour is projected as ‘waste’, that is, in opposition to capitalist ‘value’ of surplus accumulation that produced profitable output in the form of the ‘able-bodied’ labourer (Gidwani & Reddy, 2011). This ‘wasteful’ or ‘inefficient’ labour, casted as ‘disordered’, then justified colonial intervention towards ‘discipline’ and ‘modernization’ for labour and the empire, respectively. To the justifications of this argument, I first briefly discuss the formulation of the famine relief works policy, followed by details of work organization on the site of famine relief works and then examining the variation to the Famine Code works in the form of intermediate works.

8.1. THE FAMINE CODES

Different kinds of systems existed for construction work in colonial India: (a) ordinary works financed by provincial or district funds. These works were carried out by contractors and subcontractors in ordinary times; (b) test relief works debited to famine relief carried

out under the Famine Code rules. These works were set up to 'test' the extent of distress in a district, measured by the number of people who came to seek work and finally (c) regular relief works where task and gang system was enforced during famines.¹ In terms of size, the Famine Codes divided the works into two parts: large works that could employ at least 1,000 persons for at least three months, and all others were considered small works.²

To understand how the famine policy aimed to increase labour productivity, it is important to understand the influences on the formulation of famine relief works. Several considerations affected the policymaking of putting famine victims on construction work in India. The first was that the most proximate cause of famine distress was a fall in incomes and purchasing power, rather than necessarily a shortfall in the availability of food (Ambirajan, 1978). Famine employment would thus not only increase purchasing power directly but also roads and railways were seen as a means to overcome inter-regional variations in crop output and food availability (Derbyshire, 1987; Hurd, 1975; McAlpin, 1983). Famine policy at the time was also heavily influenced by a belief in the efficacy of free markets and the non-efficacy of intervention, including in the functioning of grain markets during famines. Cost reduction was the main consideration behind the way the famine works were to be carried out, while the state attempted to avoid excessive taxation, though additional taxes were imposed anyway as pointed out by Brennan (Brennan, 1984, p. 92). However, rates of physical outcomes and project completion were also a function of wage rates as we will see below.

The Famine Codes were formulated after the first Indian Famine Commission met in 1878–1880 to simplify administrative action during famines. Brennan discusses debates over provision of relief during the creation of the Famine Commission (Brennan, 1984). In order to reduce the cost of expenditure on relief, 'labour as a test of need' was essential to the policy that came into being in the Famine Commission Report of 1880. Large public works under Public Works Department (PWD) supervision were to be set up for the following reasons.

This provided three checks on waste: first, the famine victims would have to prove that they were in need by leaving their

homes to go to the relief work—the *distance test*; secondly, they would have to fulfil a task not less than 75% of that performed by labourers in ordinary times, and for a sum gauged to provide only enough to sustain life—the *task and wage tests*; thirdly, they would be under PWD (i.e. European) supervisors who would prevent slack discipline and personally honest. (Famine Commission Report 1880 Part I, para 131; quoted in Brennan, 1984, p. 104)

Therefore, the underlying logic behind placing large populations on infrastructure building during famines stemmed firstly from the objective of preventing ‘waste’, that is, labour even during famine periods should provide value to the colonial state in order to curb ‘wasteful’ expenditure. Second was the idea that work made the colonized population disciplined and industrious (Shahid, 2021, p. 23); therefore, the government discouraged gratuitous relief, which was not provided to any person ‘who can and ought to work’.³ Large public works were preferred over localized small relief works set up by village headmen (Shahid, 2021, p. 28). Hence, the two aims were interconnected: to fulfil the ‘moral template’ of value, labour was something to be made full use of (Gidwani & Reddy, 2011, p. 1627); so the famine labourers needed to be disciplined by the state. The famine policy, as a result, also underscored differences between European and Indian supervisors by asserting the inability of the Indians to prevent the indolence of their fellow countrymen.

Alatas discussed the motivations behind attempts to modernize the colonial populations; particularly highlighting how, via the concept of indolence, the labourers were divided into ‘useful and meaningless’ (Alatas, 1977, p. 83). Poor laws had a significant impact on the famine policy (Ambirajan, 1978), with the underlying aim to make the indigent more ‘industrious’ through labour. In the famine labour case as discussed below, making the distinction between what was called ‘efficient’ and ‘weakly’ labour was meant to ensure high labour productivity. This was furthered by allotting certain amount of tasks to the labourers per day, and the wage was calculated accordingly. Famine work thus became the moment for the colonial state to legitimize control over labour and wages with the main objective to increase labour productivity while reducing cost of relief and construction (Shahid, 2021).

8.2. FAMINE RELIEF WORKS

The famine administration was elaborately laid out, with each detail of organization of works, including tasks and payments, being coded in the Famine Codes. The relief works were under the PWD and Revenue Department, with the superintending engineer being in charge in his circle of the province, and the divisional engineer being responsible for his division. They ensured that the PWD and Famine Codes were followed by their subordinates in addition to supplementary orders from the local governments.⁴ The divisional commissioners and district collectors, along with the civil staff, were also heavily involved in communication and management of the famine administration, including management of funds. Supervision and discipline were the duties of the district engineer or supervisor. Inspecting officers on relief works were the famine superintendents, hired from the staff corps of the military authorities. Special civil officers were appointed for each particular construction work. Wages of administrative staff present on the famine relief works varied according to their position. Famine establishment at the end of the 19th century comprised of a naib tahsildar whose monthly salary ranged from ₹50 to ₹100; two work agents were paid ₹40–₹60 a month; two sub-cashiers were paid a monthly salary between ₹15 and ₹20; and few watchmen and peons were paid ₹6 and ₹5 per month, respectively.⁵

The supply of labour for public works construction was uneven, requiring intermediation by a recruiter (Shahid, 2021). In ordinary times, a labour contractor was employed for labour recruitment and supervision, as in other industries and mills in India. However, under the system of relief works as prescribed in the Famine Codes, the intermediary was to be rid of. Many reasons were given for this: the contractor may try to derive profit or attempt to employ workers only in the best of health and willing to accept cheap wages to finish the contract in a fixed time.⁶ Therefore, the government decided to manage the famine-affected population directly, disallowing the use of contracts on famine relief works.

The division of famine labour into ‘able-bodied’ and ‘weakly’ was the first major step towards regulation of wages. The able-bodied performed the main task towards construction work: mostly digging as earthwork but, at times, also stone-breaking and metal-working.

The rest of the population on famine work were considered superfluous, who, if not too weak to work, were employed for carrying earth. According to the Famine Codes, persons on relief works were to be classified as follows: able-bodied persons accustomed to labour on the kind of work required for ordinary works (professional labour such as diggers); able-bodied persons accustomed to labour but not the kind required for ordinary construction work (labourers but not professional); able-bodied persons not accustomed to labour (able-bodied but not labourers); persons not able-bodied but fit for light employment on relief works (weakly).⁷ On the basis of these divisions, and to ensure maximum output from the available labour, the labourers were divided hierarchically into classes of workers depending on tasks and ability: Class I (or Class B) comprised of diggers, including all 'able-bodied' males, Class II (Class C) of carriers including the 'weakly', Class III (Class D) of working children, Class IV (Class E) for adult dependants, Class V (F and G) of non-working children and a final 'special' class comprising of gang mates (Class A). All men who could labour for digging work were classed as diggers, and all weakly persons, such as children and women, were given the supposedly less strenuous task as carriers of earth. Yet some women were employed as diggers at times, and any reduction in their task allocation was considered wasteful (Jha, 2019, p. 22). Those unable to work were admitted to poorhouses.

Caste and gender hierarchies were reproduced in colonial famine work and wage allocation, including the supply of relief to non-workers. During famines, public works construction was carried out by a mix of professional and skilled labour alongside unskilled wage labour from agriculture. 'Professional' has been used in the sources to describe a labourer whose usual business was in a certain occupation, referring to the castes and labourers that practised, say, digging, such as *luniyas*, *chamars* or *beldars*. Urban wage workers and artisans also slipped down in hierarchy to join diggers and carriers on famine works. However, the colonial state reinforced caste and class in division of labour on the site of work, as well as by distinguishing between persons who deserved charity and those who needed to work to earn relief. People of 'respectable' castes were given higher positions of overseers or accountants, whereas 'respectable' women who observed purdah were provided with charitable relief in their homes. Hence, arguments that

suggest agrarian labour relations and institutions were replicated in other contexts significantly underplay the role of the state in segmentation of labour categories.

The 'able-bodied' and 'inefficient' workers on the famine relief site were clubbed into gangs that comprised of families and communities, oftentimes from the same or surrounding village. Each gang was headed by a gang mate, who performed non-manual logistical tasks such as tallies in a register. The famine works system adopted in the NWP and Oudh divided the workers into gangs ranging between 60 and 80 persons, and less than 80 in Bengal.⁸ One-fourth of the gang comprised of able-bodied diggers and the rest were carriers, and a daily task was fixed per gang measured in cubic feet of earth dug. Families as a whole were employed on the relief works and kept within the same gang as far as possible. This would assure completion of tasks even if one family member was too weak. Tasking was also related to the way payments were made; in theory, wages were calculated by tasks accomplished by the gang, but payments were given by individual. Therefore, by dividing the labouring population into gangs, not only was the tasking and wage calculation simplified, but it also pressured the gang to complete tasks as each individual wage depended on it. The system was thus geared towards producing maximum value for the expenditure incurred on famine public works.

Thus, the workers had to perform minimum set tasks to earn wages to maintain themselves and their family, without which it was difficult to earn sufficient wages. Further measures to keep costs low included strict enforcement of task work so that all labour—both able-bodied and inefficient—could not earn more than the strict maximum wage and perform more than the given task.⁹ This would also enable only labour that really needed relief to come to relief works (the wage test) and keep costs in check. Given that dependants were paid separately, the expectation was that subsistence wage would suffice for the individual worker. The weak persons affected most by famine could only perform nominal tasks, so they earned less, which was justified under the presumption that weakly persons required less food than able-bodied as they performed less manual labour (rather than weakly needing equal or more food and fewer tasks in order to recover).¹⁰

The daily wages were divided into a full ration (to be given if the allotted task was completed) and minimum wage (to be given even if tasks not completed). The minimum wage was defined as the amount of money sufficient at the current prevailing rates to purchase the grain equivalent of the minimum ration.¹¹ The Famine Codes set this amount as being slightly above subsistence level. Subsistence-level wages were a matter of debate between Cornish and Temple, who clashed on how much the Indian body required as compared to Europeans, and thus how much the famine labourers should be paid given the financial constraints of the government (Hall-Matthews, 2008, p. 1194). The money wage of the individual classes of famine workers was thus calculated by how much the set level of diet as prescribed in the codes would convert to the grain equivalent consumed in the area (such as rice or wheat).

The minimum and maximum ration for each class of worker was converted to *chhataks*, which, in the British standard of measure, was at the rate of 1 pound equalling 8 *chhataks*, or half of a government *ser*. Under famine times, wages could buy much less amount of food due to fluctuating prices for grains. A document called the 'ready reckoner' was made available to the famine commissioners, which provided a wage conversion table based on fluctuating grain prices (Shahid, 2021, p. 34). For instance, if the prevailing rate of grain was at 10 *ser* per ₹, the wages in paise to be paid to able-bodied male diggers (Class B) would vary between a maximum of 9 and minimum 5, and would increase or decrease accordingly for each class and with changing rates of grain in the market.¹² In practice, there were lags between the set wage and the grain prices in the markets, so often the labourers would also be at a loss.¹³ For workers who were only able to do short tasks or could not complete their tasks, they were penalized by being allotted a lower 'penal wage' ranging from 2–4 paise depending on class of worker and grain prices. The *maximum* wage was the highest which could be earned in one day; while the *minimum* wage was the lowest which had to be paid in a famine-affected district. Sunday wages were the 'minimum' wages.

As far as methods of wage distribution are concerned, payments were preferred to be made daily. In general, payment was made by gang; a gang register was kept with the details of the workers. The

other way was to pay the workers with a ticket system. If two or three rates of wages prevailed, then a ticket would be given in the morning for each rate of wage to the workers. The workers would assemble in the morning and were given their corresponding tickets by the overseer. Out of expediency, at times, the ticket system was combined with the 'cowrie system' in which the carriers were given cowries for each basket brought throughout the day, while the diggers were paid in the evening after measurement of work completed.¹⁴ The tickets were made of zinc and these zinc tickets represented a certain number of cowries based on the number of baskets of earth carried.¹⁵ Therefore, a certain number of cowries were given for a particular amount of earth carried in the baskets (rates unavailable); in this sense, cowries represented a particular amount of work done, rather than currency. In the evening, these tickets were exchanged for currency in paise and could only be cashed by government servants. These tickets could also be presented at a bania (trader) shop if they were to be exchanged for grain. The latter was the case when the government wanted to encourage free grain market and appease local landlords and merchants, or when there was a lack of currency on the work site. The intricacy with which the payment system was regulated by the famine establishment was to ensure least amount of 'waste' by calculating and paying each worker the wage they 'deserved' for their labour.

8.3. THE INTERMEDIATE SYSTEM

1896–1897 was one of the worst and widespread famines spanning two full years. The famine began in British Bundelkhand, comprising the districts of Banda, Hamirpur, Jhansi and Jalaun in the Allahabad division of the NWP.¹⁶ The colonial government noted how the NWP and Oudh were the worst hit both in terms of area and intensity of famine, because harvest failed for at least two seasons continuously.¹⁷ Test works were set up in January 1896 and in the spring, relief works were set up. The case of the intermediate system is interesting because it represented a major deviation from the initial prescriptions of relief works in the Famine Codes.

The famine relief works as described above posed one major so-called problem to the colonial administration: how to 'infuse more

energy and industry into the able-bodied minority' while reducing the number of 'inefficient workers'.¹⁸ The tasks and relative wages were therefore to be allotted in a way to ensure that the weakly and 'inefficient' labour was left out, not just due to their low productivity on the work site but also to keep the able-bodied 'motivated' and 'industrious.' This was done to obtain labour productivity measured in terms of wages, the idea being a reduction in the number of 'inefficient' workers by reducing the possibility of workers getting a minimum wage even if they did not complete their respective tasks.

Since the Famine Commission Report of 1880, a contested topic was the abandonment of the minimum wage. During the 1896–1897 famine, the government realized that the minimum wage can be dispensed with when famine was not severe but should be adopted when distress during famine was acute. In the opinion of the British government in India, the minimum wage had a 'demoralizing effect' on the labourer, that is, made the labourer lazy and, by influence, made other labourers more prone to shirking work.¹⁹ In fact, the minimum wage was considered as almost 'gratuitous relief' for able-bodied workers.²⁰ Therefore, the control over wages was based on the consideration that those who had the ability to work must earn the relief through sufficient output of labour. Hence, the transition from lazy to industrious was judged by the amount of value the labourer could produce in the form of construction work accomplished. The amount of returns the colonial administration could squeeze out of famine labour determined the deviations from the Famine Code that took place in the famine administration (Shahid, 2021).

The famine establishment then experimented by introducing what was called the 'intermediate system' at select relief centres.²¹ The intermediate system was devised as a method of 'payment by results' primarily in the NWP with no minimum wage. Hence, without completing a set amount of work, there was no possibility for the famine labourer to earn wages. Essentially, the intermediate system was then a middle ground between the task work as prescribed by the Famine Code and the contract system under the PWD during ordinary times. Task work was the norm under famine relief works, which was different from piece work. Excluding instances of 'contumacious idleness', the Code system allowed the workers to

have a bare minimum wage regardless of the work performed, but this was considered too attractive as a test for cases where distress was not acute.²² Piece work was not just payment by results but also work which had no maximum limit. If a limit was placed on maximum work given the state of the labourers employed on relief works, it became task work.²³ Piece work was therefore as a term not generally used for any kind of relief work and had no limit but the able-bodied labourer's capacity to work. Piece work required additional supervision to ensure payment, measurement and completion of tasks, and the limited establishment had to work longer and harder than usual unless piece work was adopted on a small scale.²⁴ The intermediate system, however, was not piece work, but rather daily task work with low maximum and no minimum wage.²⁵ As in famine works, under this system, payment was by gang for a 'piece of work' assigned to the gang as a whole under the petty contractor.

Public works construction under the intermediate system was not given to large contractors as such but piece workers, that is, those who would employ maximum 200 people. The objective was then to eliminate the large contractor which would also allow elimination of competition of the government works with the private employers. Therefore, the public works under the intermediate system also functioned as test works to gauge the intensity of the famine and the need for opening special relief works under the Famine Code system. Preferred persons for this role as per the government included villager *pattidars* instead of PWD contractors, who would live on the site of work and exacted about 20 per cent remuneration from the fixed rate of wages for his own labour, interest on capital and expenditure on inputs and implements. The contract rates were not competition rates, but normal rates of preceding years raised by 25–50 per cent with regard to grain prices.²⁶ Payments were made to this petty contractor once a week or once a fortnight as his own capital was minimal.

Therefore, first objective of these works was to make administration of large populations easier by discouraging those from coming to the relief works who could be employed elsewhere. When harvest times approached, measures in the form of regulation of wages were taken to make certain that labourers who are able to work would go back to cultivate in the fields to reduce state

responsibility of providing relief. As mentioned, a low maximum limit was placed on wages, whereas there was no minimum wage. This limit on maximum earnings was aimed at reducing competition for demand of labour by private companies or in agriculture. However, the wage earned by the male labourer on intermediate works was meant for the whole family. Women and children were to be excluded from intermediate works under the assumption that the male 'able-bodied' would be able to provide sufficient income from his wages; hence, whole families need not migrate to intermediate works as they otherwise would under famine relief work.²⁷ No provisions were made for other adult dependants. The responsibility of feeding dependants or the 'inefficients' then lay with the 'able-bodied' male member of the family, that is, to adjust the overall cost of living with the wage earned, rather than the colonial government. But at the same time, there was the risk of exacerbating distress by excluding a certain proportion of people from relief work. In this scenario, it was decided that, in places of acute distress where it is inevitable that inefficient labour will be employed, a wage not more than the minimum wage was to be provided. This also put a check on the costs.

The second objective was to reduce the number of idle workers who may 'demoralize' the efficient labourers. What this effectively meant was, since labourers were placed in gangs, that weaker labourers may reduce the overall productivity of the gang, therefore reducing the output of work accomplished per day. Therefore, the weaker workers were put on reduced tasks in one gang.²⁸ The overall aim of increasing labour productivity was also reiterated by Charles Blair, executive engineer of Indian PWD, who described three main aspects of famine relief: saving life, economy of control and prevention of demoralization.²⁹ Blair encouraged the application of a system which would increase labour productivity.

We have, on the one hand, a multitudinous throng, chiefly composed of the 'useless gear' and other inefficients, on navy work; while, on the other hand, we have a body of stalwart men, skilled in the very labour on which they are employed. The problem is how to get a fair day's work out of this heterogeneous mass... Between daily labour and contract work, there is one intermediate step, which, if it could be introduced throughout the whole body of work-people, would go far to

promote economy-viz., a system of petty contracts. Families and neighbours will combine, and the spirit of thrift will exercise in some instances not only a profitable but an emulating influence. The system, however, is not applicable throughout; but it should be encouraged in all cases.³⁰

Despite elaborate rules, the early system of intermediate works 'failed' and had to be replaced with a modified version. The so-called failure was accorded to the presence of the middleman, whose primary goal was to finish the construction work as quickly as possible. This implied that those who needed least assistance were able to earn more than a subsistence wage, as able-bodied workers could get more tasks accomplished, whereas the weaker workers were at times unable to earn anything. As a result of this deviation from the original Famine Codes, the colonial government replicated the exact scenario it used to justify prohibition of contracts on relief works in the first place.

Moreover, a large establishment with an added layer of the petty contractor would cost more and would be 'paternal and demoralizing' due to its inability to exact the maximum output from labouring gangs.³¹ The high prices during famines disturbed the balance between wages and needs; thus, under the system, the main bread earner would earn, but the rest of the family could starve. Therefore, while the system paid the earner higher rate for work, there was nothing to prevent his 'idleness'.³² Further, contrary to expectations, the *pattidars* often did not come forward as contractors, and in the end the work eventually went to the regular contractors on the condition of definite payments.³³ Therefore, the 'failure' of the system was not just to exclude the weaker labourers but also to signify an inability on part of the colonial government to control labour productivity directly or extract sufficient value from labour. Given this problem, the pieceworker was dispensed with, and work was handed out to the workers directly by government officials. Therefore, the modified intermediate system was introduced, and, as on Famine Code system, the middleman was rid of. The modified system was then intended to infuse 'industry' in workers with the option of earning higher wage and punished the 'idle and contumacious' persons through low wages for low tasks and no minimum wage.

At the same time, the 'contumacious' labourers were able to strategize and shirk actions which are passed off as laziness in colonial sources. C. G. Palmer, additional superintending engineer of Famine Relief Works, pointed out how labourers realized that the difference between Famine Code and intermediate works was not significant except that more labour input was required.³⁴ Therefore, the 'able-bodied' would find employment elsewhere where remuneration was higher while leaving dependants or 'ineffectives' on famine works. Palmer also noted that men were able to put themselves on 'weakly' gangs with lower task allocation, reducing the amount of total work accomplished.³⁵ Finally, a phrase appearing as a pseudonym in the newspaper *Pioneer*, supposedly used by 'coolies' with regard to work and representative of their work ethic, shows prevalent contestations between government famine administration and private employers on the ability to exact sufficient labour value from famine victims: *Mun Mane Kam Kiay*, *Mun Mane Bitay* or 'work when one wishes, spend/waste when one wishes'. The person corresponding via letters to the editor as *Mun Mane Kam Kiay*, *Mun Mane Bitay* criticized the government for 'waste of money' as relief works were drawing away labour due to 'excessive' wages being paid to them.³⁶ Thus, the idea of time and physical effort that, if not used in labour, is spent uselessly or is waste shaped the distinction between lazy and industrious.

The modified system was implemented in all districts in March of 1897 where distress was not acute. The main objectives of the modified intermediate system were as follows: to exclude the workers who could find alternative employment elsewhere (achieved by placing a limit on maximum wage but no minimum wage); to exclude dependents termed 'idlers' or 'useless worker' who 'demoralized' the able-bodied workers and could be supported by healthier members in the family (provide ample wage to able-bodied, while low wages would eliminate competition with private employers) and, finally, to improve returns of investment in construction work (increase in the work done while lowering cost would ensure labour productivity).³⁷ The supervision of work was carried out by the PWD staff. Payments were made the same way as in the intermediate system: the work of the gang was measured up and workers were paid directly. Payment depended on the total quantity of work done,

and tasks allotted by party of one digger, and two carriers or more in case carriers were children.³⁸

The modified intermediate system made the labourers worse off than in the older intermediate system. Since the gangs were made by task, when families migrated together, they ended up being separated and being put in different gangs with different task requirements. Even though a family of three would earn up to 18 paise more than the older intermediate system, this was still almost the same as what would be earned including the Sunday wage on the NWP system of famine relief even if they received a subsistence wage.³⁹ With a wage not exceeding 4 paise, they were expected to maintain a whole family that was paid subsistence wage under the intermediate system. Moreover, if they failed to complete a full or even a three-fourths of a task, then their earnings would fall drastically below what could be earned under the NWP system.⁴⁰

The aim of reducing the number of women and children on the works was also unsuccessful. Parents often brought dependents who were unable to work, and the lack of charitable relief on the intermediate works adversely affected the health of these children. Therefore, either the children were left to die, or cooked meal was provided in some instances when possible.⁴¹ The establishment costs otherwise high on famine public works were even higher on intermediate works due to the supervision required. Finally, the objective to eliminate competition with private works also was not completely fulfilled. As T. Higham, secretary to the Government of India for PWD, reported, the famine relief works interfered with the labour supply with the construction of the Hajipur-Katihar railway works.⁴² The people went to relief works due to high famine prices and a possible physical inability to migrate to far away private construction works.

Overall, the major issue with the intermediate systems were the initial goals: the government noted that the major reason was the inability to raise the rates of wages sufficiently, as well as the lack of time to streamline and establish the scheme successfully.⁴³ In the end, intermediate works were too similar to Famine Code works, except the labourer had to provide more labour for the wage received, with no minimum wage. Further, the scheme tried

to accomplish two incompatible aims: to increase the earnings of those who were industrious all the while trying to decrease the wages and hence discourage the weakly and inefficient labour. The solution to this was proposed as to keep the original system as prescribed in the Famine Code, under the impression that ‘what the Code calls “minimum” wages are a handsome living that people can get fat on: and what it called “the penal wage” is a very fair subsistence wage’.⁴⁴

The general level of wages given to the famine workers, however, was bare subsistence: medical officers noted how the wage was just enough to ‘keep the body and soul together’ rather provide sufficient relief to the famine victims.⁴⁵ To what extent the expectations of labour output may have affected emaciation of the famine victims even further is unclear. But it was noted by T. W. Holderness, secretary to the Government of NWP and Oudh, and later Department of Revenue and Agriculture, that the system was not to be recommended in the future especially because it posed danger to increasing mortality and was not necessary to discourage people to go back to their livelihoods.⁴⁶ Yet the Famine Commission Report of 1901 took the intermediate system as the basis for the development of ‘New Code Works’, that is, a relief works system of payment by results with few modifications.⁴⁷

8.4. CONCLUSION

In this chapter, I attempted to show how, in the case of famine labour, the colonial state tried to maximize the value produced from investing in famine relief efforts. With the aim of increasing the returns from labour to incurred expenditure on relief, the Famine Code works were deviated from to further reduce the costs by targeting wage rates, along with the expectations of increasing labour input. To justify this, conceptions of ‘waste’, ‘indolence’ and ‘industriousness’ were applied to famine victims, and the labour in particular potentially viewed as ‘an untapped potential awaiting transformation into value’ through colonial intervention (Gidwani & Reddy, 2011, p. 1630). Employment of famine-affected population as an unusual and undernourished source of labour was further rationalized through the ideas of modernization and development via construction of infrastructure. It fed into legitimization of

colonial rule through disciplining of the 'physical infirmity and cultural inferiority' of the Indian (Gidwani, 2008; quoted in Gidwani & Reddy, 2011, p. 1628). Furthermore, a stress on bio-cultural difference with the Indian was used to justify low ration, and a consequent low wage. Therefore, through this chapter, I demonstrate that control of labour was central to the larger colonial goal of capitalist production.

Overall, the case of famine public works shows that colonial famine policy was geared towards the regulation of labour productivity. The introduction of the intermediate system demonstrates that prescribed Famine Codes for relief could be deviated from. Moreover, not only was the intermediary dispensable but also his position could be moulded by the government as it seemed expedient. Therefore, the argument that labour productivity and markets depended on 'traditional' institutional factors rooted in the agrarian system becomes speculative in the case of famine labour. Labour mobilization was possible without intervention from an intermediary during famines, as well as his duties substituted or dispensed with. The role of colonialism in shaping labour institutions, relations and processes was thus significant.

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1. Revenue and Agriculture Department (R&A), Famine Branch (1897b).
2. British Library (1894, Appendix ii, p. 36).
3. Revenue and Agriculture Department (R&A), Famine Branch (1897c).
4. HathiTrust Digital Library (1901, p. 26).
5. Government of India (1901, p. 29).
6. 'Narrative of the drought and famine which prevailed in the North-Western Provinces during the years 1868, 1869 and the beginning of 1870...' (Home Department, Public Branch, 23 December 1871. NAD).
7. IOR/P/4568, 36.
8. Revenue and Agriculture Department (R&A), Famine Branch (1897e, 29ff).
9. Uttar Pradesh State Archives (1896, p. 5).
10. Revenue and Agriculture Department (R&A), Famine Branch (1897e).

11. IOR/P/4568, 37.
12. Uttar Pradesh State Archives (1896).
13. HathiTrust Digital Library (1898, p. 67).
14. British Library (1881–1882, pp. 156–7).
15. IOR/L/PARL/2/175.
16. Government of India (1898, p. 53).
17. Revenue and Agriculture Department (R&A), Famine Branch (1897a).
18. Revenue and Agriculture Department (R&A), Famine Branch (1897e).
19. Revenue and Agriculture Department (R&A), Famine Branch (1904).
20. Revenue and Agriculture Department (R&A), Famine Branch (1904).
21. Revenue and Agriculture Department (R&A), Famine Branch (1897d).
22. HathiTrust Digital Library (1898, p. 60).
23. IOR/P/4568, 37.
24. IOR/L/PARL/2/175, 177–178.
25. HathiTrust Digital Library (1898, p. 60).
26. HathiTrust Digital Library (1898, p. 60).
27. Revenue and Agriculture Department (R&A), Famine Branch (1897b).
28. Revenue and Agriculture Department (R&A), Famine Branch (1897c).
29. Blair (1864, p. 179), available from HathiTrust Digital Library.
30. Blair (1864, pp. 185–186).
31. British Library (1897, pp. 14–15).
32. Scarcity Department (1897a, pp. 84–85).
33. IOR/P/5209, 10.
34. Scarcity Department (1897a, pp. 83–84).
35. Scarcity Department (1897a, p. 84).
36. Scarcity Department (1897b, p. 9).
37. Revenue and Agriculture Department (R&A), Famine Branch (1897c).
38. Scarcity Block Department (1898, Box 38–39).
39. IOR/P/5209, 13.
40. IOR/P/5209, 13.
41. Revenue and Agriculture Department (R&A), Famine Branch (1897c).

42. IOR/P/5209, 21.
43. Scarcity Department (1897a, pp. 84–85).
44. Scarcity Department (1897a, p. 85).
45. HathiTrust Digital Library (1898, p. 146).
46. Remarks by Mr. Holderness in HathiTrust Digital Library (1898, p. 367).
47. HathiTrust Digital Library (1901, p. 31).

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INDEX

- Aasami, 123
Aathmahi, 114
Aftagira, 113
 Agriculture, 10
Akramahi, 114, 137
 Aligarh School, 7
 Anthony Barbieri-Low, 10
 Arguments
 Kerr, 243
 Pim de Zwart and Lucassen, 45
 Rajat Ray, 111
 Roy, 243
 Sanjay Subrahmanyam, 11
 Surendra Arjun Shirsat, 30
Arthashastra, 7
Arthashastra of Kautilya, 7
 Article, 224, 226
 The British Rule in India, 33
 Parthasarathi's 1998, 4
 Pim de Zwart and Lucassen (2020), 45

baddal mushahira, 123
Bara Ballooteh, 197
 Khandesh, 202
 registered, 200
 taxpaying and registered, 200
 Bhils, 178
 Black Town, 97
 Brahmans, 174

 California School, 3
 Chhatrapati (king) Shahu
 Bhonsle, 146
 Choultry Gate, 93

 Christian, 53
 civilizations
 classification, 2
 construction work, 243–253
 all India census, 245
 certification of the age, 245
 enhancement of wages, 247
 first all India census, 243
 Ian Kerr's view on wages, 243
 improved wage-incomes, 253
 improvement in real earnings, 253
 masons and manual labourers, 247
 men and women, wages, 246
 muccadam, 244, 246
 paysheets, 245, 246
 real wages, 250, 251, 252
 Stephens' accounts, 244
 twofold reason, 246
 wages, 248–249
 welfare levels, 253
 cherimerry, 260, 261
 coolies and most masons, 261
 cost of subsistence, 256
 depressed living standards, 263
 hireling labour, 263
 Indians and British workers, 259
 juxtaposes workers, 265
 macroeconomic context, 264
 price trends of subsistence basket, 264
 ratios, 257, 260

- Roy argument, 259
- subsistence basket, 254–255
- subsistence necessities, 256
- transactions in advance, 263
- women, 245
- women and boys, 252
- construction workers
 - Deccan, 242
 - remuneration and welfare levels, 241
- Deccan
 - agricultural characteristics, 203–204
 - Captain George Wingate's write up, 205
 - construction workers, 242
 - countryside occupations, 197–214
 - Bara Ballooteh*, 197
 - farmers' household budgets, 210
 - labour relations, 211
 - primary labour relations, 212, 213
 - reconstruction, 200
 - registered and taxpaying, 199
 - Dharwar collectorate, 209
 - Goreh market sellers, 207
 - major economic texts
 - comparison, 224–226
 - population, 170–179
 - administrative divisions, 170
 - Bhils, 178
 - Brahmans, 174
 - class/status distribution, 175
 - depopulated Khandesh, 172
 - historical perspective, 172
 - Musalmans, 174, 176
 - Rajputs, 174
 - sex ratios, 179
 - Shudras, 176
 - Sykes, 174
 - Sykes' description, 177
 - working and non-working, 179–185
 - year 1822, 173
 - rural heads reconstruction
 - categories, 201
 - sources, 167–170
 - urban and rural populations, 185–190
 - demographic estimates, 189
 - Dharwar collectorate, 185
 - pait, 185
 - Poona collectorate, 188
 - Sykes' view, 185
 - urban occupations, 190–197
 - countryside, 197–214
 - economic activities, 194
 - heads of household, Haveli *Pargana*, 191
 - primary labour relations
 - reconstruction, 196
 - Pune, 190
 - Sahyer taxation and customs, 193
 - shops in Ahmednagar city, 192
 - weavers, 195
 - wage labour, 165–167
 - wage levels, 214–222
 - agricultural labourers, 215
 - artificers, 217
 - developments, 220
 - Divekar's conclusion, 221
 - economic historians, 222
 - non-agricultural
 - occupations, 214
 - rates of hire per month, 218–219
 - Sykes' view, 214
 - weaver, 217
 - wage relations as exemplified by Sykes, 227–230
 - west-east divide, 205
 - working and non-working
 - population, 179–185

- crude age divisions, 181
- Sawunt Waree state age division, 182
- schools per inhabitants, 183
- sex ratios, 180
- social and gender division, 184
- economic and occupational
 - structure of Portuguese India, 47–53
 - Goa, 49
- escravos de ganho, 51
- Estado da Índia*, 45–47
- Famine Codes, 277
 - employment, 278
- Goa, 49
- great divergence, 241
- Great Divergence Debate, 1, 2–9, 44–45
 - Arthashastra* of Kautilya, 7
 - participants' views, 45
 - Roman Studer, India's place, 5
 - Sivramkrishna, study on Mysore, 4
 - study by Parthasarathi, 4
- Greater Indian Peninsular Railways (hereafter GIPR), 243–246
- Gulgule Daftar*, 24
- Hingne Daftar*, 24
- India
 - dependency on wage incomes, 10
 - Great Divergence Debate, 2–9, 44–45
 - place and role of wage labourers, 9–14
 - Portuguese settlements in western, 46
 - purchasing power of wages, 8
 - wage labourers, 1
- Kamavisdar*, 117
- kamavisi mulukh*, 145
- Khujaste buniyad*, 146
- labour productivity, 276
 - estimates, 276
- Famine Codes, 277
- famine relief system, 277
- Lekhapaddhati*, 22
- Madapollam, 90
- Madras
 - annual salaries paid to Portuguese soldiers, 90
 - Choultry Gate, 93
 - cost of maintenance, 91–98
 - allowances for English EIC employees, 95
 - annual wages paid out, 92
 - Black Town, 97
 - customary rights/allowances, 94
 - Pagodas allowances, 95
 - rights, 93
 - wages and food rations, 96
 - English settlement, 86
 - Ensign Betts, 88
 - military payment scales, 88
 - payments to soldiers, 89
 - Portuguese settlement, 86
 - prices of locally produced textiles, 98–102
 - cloth, 100
 - cotton, 99
 - English Goods, 102
 - movements of cotton, 102
 - price fluctuations, 101
 - reactions by workers, 103–105
 - caste-wise collective action, 105
 - increase in rates sought by washermen, 104

- wages, 87–91
- Maharashtra
 - documents, 110
 - money in circulation, 111–112
 - prices, 117–118
 - food items, 118
 - Kamavisdar*, 117
 - salary, 113–116
 - Garrison, 113
 - naval employees, 115
 - wages, 109, 112–114
 - daily basis, 116–117
 - salary, 113–116
 - weights and measures, 117
- Malabar Town, 89
 - annual salaries paid to soldiers, 90
- Maratha region, 123
 - administrative division, 123
 - baddal mushahira*, 123
 - 18th century, map, 124
 - frequency of wage payments, 138
 - modes of payment
 - kind or cash, 135–136
 - kinds of coins, 136–137
 - time units, 137
 - nominal to real wages, 139–141
 - movement of prices of millet, 140
 - prices of food grains, 139
- Peshwa archives, 142
- Peshwa Daftar*, 123
- salaries and wages, 126
 - central government civil servants, 127–130
 - military, 130–133
 - private wage payments, 133–135
- salary-expenditure proportion, 125, 126
- wages in 18th-century, 122
- Maratha state
 - division, 147
- Modi* script, 22, 123
- Musalmans, 176, 178
- Nagar Jamav Daftar*, 147
- naik/nayque*, 51
- nair*, 51
 - Book of Duarte Barbosa*, 51
- opportunities and pitfalls of historical study wages in India, 20–22
 - archival sources in Rajasthan, 24
 - Daftar Diwan Hazuri*, 24
 - dastur-ul-amals-manuals*, 25
 - interpretation problems, 25–29
 - Marathi sources, 22–25
- pait, 186
- Peshwa Daftar*, 147
- Prant Ajmas Daftar*, 123
- Pomeranz, K., 3, 109
- Portuguese India
 - caste indications, 50
 - Christian, 53
 - customs house, 49–50
 - economic and occupational structure, 47–53
 - ethnicity and religion, 53
 - five settlements, 49
 - Goa, 49
 - meirinhos*, 49
 - nair* and *naik*, 51
 - remunerations of boys, 52
 - three settlements, 49
- Portuguese “state of India.” *see* *Estado da Índia*
- Prant Ajmas Daftar*, 123
- pre-statistical period, 20
- quantitative evidence, 21
- railway construction, 242
- Rajputs, 174

- Sannika Daftar*, 147
- Shudras, 176
- Sinnar *pargana*
- agriculture commodities
 - prices, 160
 - 14 dehe (villages) and kasba
 - Sinnar, 148
 - economy, 149
 - purchasing power of wages,
 - 159–160
 - revenue collection, 150–151
 - socio-economic character
 - in 18th century, 147–151
 - wages, 146
 - medium and low taluka and
 - village officials, 153–157
 - ordinary and unskilled
 - labourers, 157–159
 - purchasing power, 159–160
 - salaries of high taluka
 - officials, 151–153
 - state of India, 47
 - commerce, 48
 - economic life, 48
 - Luís Filipe Thomaz's view, 47
 - urban in character, 48
- Sykes, 168, 174
- towns/cidade*, 49
- wage labourers
- agrestic slaves, 13
 - English authors' view about
 - India, 10
 - Francis Buchanan's view, 13
 - geographical and social
 - mobility, relation between,
 - 14–20
 - income levels per occupational,
 - 14
 - India, 1
 - levels of urbanization, 14
 - opportunities and pitfalls of
 - historical study in India,
 - 20–22
 - place and role in Indian
 - society, 9–14
 - wages in India
 - days worked, 59–62
 - discussion and conclusion,
 - 75–78
 - European and non-European,
 - 56–57
 - long-term trends, 69–73
 - Madras, 85, 87–91
 - maintenance payments, 59
 - methods of analysis, 55–59
 - opportunities and pitfalls of
 - historical study, 20–22
 - payments, 58
 - Portuguese settlements, 54
 - regional variations and
 - market integration, 62–69
 - sources, 53–55
 - trends development in long
 - run, 74–75
 - welfare levels, 253
 - cherimerry*, 260, 261
 - coolies and most masons, 261
 - cost of subsistence, 256
 - Indians and British workers,
 - 259
 - ratios, 257, 258
 - depressed living standards,
 - 263
 - hireling labour, 261
 - juxtaposes workers, 265
 - macroeconomic context, 264
 - price trends of subsistence
 - basket, 264
 - Roy argument, 259
 - subsistence basket, 254–255
 - subsistence necessities, 256
 - transactions in advance, 263

