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Revenue Nodes in South India and Central Java

Mason Hoadley and Neelambar Hatti

Abstract

Studies of relations binding ruled and ruler over the form and content of revenue assessment during the colonial era are not lacking. Rather, the intellectual challenge lies in ascertaining the degree to which the relevant economic institutions of the subjected regions in southern Asia constituted continuity of tradition, modifications thereof, or completely alien constructs. Meeting that challenge is hindered by inequality of information revealing 'before' and 'after' conditions; an embarrassment of riches in information on the latter contrasts to poverty of the former. The present paper aims at least partially filling that gap by ascertaining in comparative perspective the basis of the revenue assessment systems prevailing in South India (Karnataka) and Central Java (Yogyakarta) during the late eighteenth and early nineteenth centuries. What makes such an undertaking not only desirable from a scholarly point of view but also possible in practice is the near unique finds of virtually untapped original source materials deriving from the respective institutions' function.

Key words: Revenue assessment, Land tenure, Inequality, Archival sources, Kaditas, South India, Central Java, local administrative traditions, Colonial policy.

Introduction

Generally speaking the administrative systems in South India and Central Java during late 18th and 19th centuries were concerned with maintaining harmony within a context influenced directly or indirectly by universal principles of cosmic and secular order based on *dharma*. Both initially experienced influences stemming from equivalent colonial institutions. The South Indian princely state of Mysore came under the influence of the British East India Company after the defeat of Tippu Sultan in 1799.[1] The Principalities of south-central Java were at an earlier date influence by the activities of the Dutch East India Company (1605-1799). Up to the early nineteenth century both areas enjoyed a great degree of autonomy. Besides, the occupation of Java by the British Expeditionary forces between l8ll and 1815 meant both areas were subjected to near identical colonial impulses. Stamford Raffles[2] and John Crawfurd[3] had career backgrounds in British India prior to heading the government of occupied Java. In addition Col. MacKenzie[4], who had previously served in Madras (India), was a key figure in the British administration of Java. He was also an ardent collector of reports, maps, and other European and Javanese documents, all of which constitute important original sources. Similarly, information concerning the nature of traditional, direct-producer obligations to their overlords in this paper draws upon the contents of documents produced by indigenous administrations. South India and Central Java have left autonomous archives whose contents have been little used in scholarly research. Those of South India, primarily the *kaditas* or 'black books' are the products of a comprehensive, all-encompassing local administrative body, the village *panchayat*. As such their contents reflect the exigencies of local legal decisions, agricultural and revenue issues, transactions, etc. Those of Central Java come from the Sultan's private archive and hence reflect the regional administration, which in turn controlled and ordered local entities. As a result, practice at the local-level in south-central Java must of necessity be interpolated from the court-orientated documents.

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[1] Hyder Ali (1720-1782) was the commander-in chief under Krishnaraja Wodeyar II, the King of Mysore. He came to dominate the titular monarch and became the de facto ruler of the kingdom as *Sarvadhikari* (Chief Minister). After his death he was succeeded by his eldest son, Tippu Sultan (1750-1799). The British fought four wars, known as Anglo-Mysore wars, against Hyder Ali and Tippu Sultan during the first half of 1700s.

[2] Thomas Stamford Raffles (1781-1826) was an English colonial administrator, historian, and founder of Singapore. He made significant contributions to the knowledge of the Malay Archipelago and to expanding the British overseas empire. As Lieutenant Governor of Java (1811-1815) Raffles introduced numerous reforms, among which were the division of Java into 16 residencies, the introduction of a land tax, and improvements in the legal and judicial system; he also attempted to abolish slavery.

[3]Trained as a doctor, John Crawfurd (1783-1868) held an administrative post in the North-West Provinces of India before being transferred to Penang in 1898 where he developed the keen interest in Malay language, culture, and history reflected in his scholarly work. When the British took Java from the Dutch in 1811, Crawfurd's familiarity with Indonesian peoples led to his appointment to a series of civil and political posts (including that of resident at the court of the Sultan of Yogyakarta). While in England on leave from 1817, he wrote the *History of the Indian Archipelago*, 3 vols. (1820)

[4] Colonel Colin Mackenzie (1754–1821), a Scottish army officer in the service of the British East India Company, subsequently became the first Surveyor General of India. He was an orientalist of note. His survey of southern India drew upon local knowledge in order to understand religion, oral histories, inscriptions, and other forms of historical evidence. He surveyed the Mysore region shortly after the British victory over Tippu Sultan in 1799. His collection of thousands of manuscripts, inscriptions, translations, coins, and paintings were acquired by the India Office Library (sic British Library).

Yet after the early 19th century the two areas developed along radically different lines. This was due to basic differences in the respective colonial powers' ambitions, i.e., those of the British and the Dutch, as well as the policies used to attain them. These in turn originated from the internal conditions of the respective metropoles over which they had little control. The British used India as both a source of exploitation by appropriating its 'surplus production' and as a market for their own industrial output. As a result, satisfactory functioning of the system was dependent on promoting a level economic development commensurate with maintaining the colony's purchasing power. In contrast, the Dutch, especially during the infamous 'Cultivation System' (1830-70), had no such qualms. Consequently they sought to maximize exploitation for the sole gain of the metropole, which was able to industrialize on the proceeds. The impact upon indigenous institutions was enormous, even though supporters of the policy claimed that they were implementing local administrative traditions, but more effectively.

Issues

Within this context a couple of challenges stand out, which can be used to organize the following discussion. The **first** is how one can know the form and function of authentic traditional (i.e. pre-colonial) institutions regulating the assessment of revenue. In should be noted that lack of a solid understanding of historical developments can lead, albeit inadvertently, to mixing cause and effect. This in turn precludes any chance of observing the process of change or of evaluating its magnitude. As we shall see, this is overcome by delving into the just-named original source materials and comparing them with the 'standard' European observations which have, heretofore, dominated scholarship. The **second** challenge is to construct an outline of the respective revenue systems, which can be subsequently compared with the views of colonial observers. A **final** point revolves about whether unearthing and reconstructing authentic institutions is worth the effort in terms of a better understanding of the historical process. Does it make any difference whether the revenue or land rent system employed is 'traditional' in the sense of having developed autonomously from local roots, or alien by virtue of being imposed from without? An observation stemming from earlier studies of corruption[5] in the respective regions points to a shop-worn truism that the degree of conformity to traditional patterns, even 'semi-traditional' ones, influences the relative adherence to the formal rule system.

Sources of tradition

The impact of European policies upon the socio-economic sphere that can be recreated from the contents of the archives of the two kingdoms provide the centre of focus. Basically the two had their own, apparently well-functioning, institutions. Despite colonial officials' posturing as working within the autonomous institutional framework, their explanations of that framework forwarded to their superiors showed either a lack of understanding or a form of wishful thinking

[5] Neelambar Hatti & Mason Hoadley, "Middlemen in the Corruption Bazar; India and Indonesia", *Artha Vijnana*, Vol. LIV, No. 3, September 2012, pp. 329-341.

in favour of a picture more congenial to the colonial powers. The degree of such becomes noticeable only within a reconstruction of traditional institutions via conclusions drawn from the testimony of their own documents. Determining the most important of these is one of the essay's primary goals. Methodologically this also allows respective research in South India and Central Java to concentrate upon its own variations of ruler-ruled relationships as captured by the revenue system. Moreover, the very act of abstracting the most important features prepares the way for further comparisons in time and space. This in turn can lead to hypothesis, model building, and eventually theories. An additional reason for the empirical method chosen here comes from the fact that theories or models are most commonly derived from the Indian experience.[6] The obvious staring point is a relatively detailed presentation of the nature of the available source material.

Yelandur kaditas of Karnataka, South India[7]

Kaditas from the Yelandar *jaghir*[8] comprise some 250 volumes of village account books. The volumes cover an almost continuous period of 60 years from 1806-07 to 1865-66. As historical documents, the *kaditas*[9] are records of revenue administration, comprising information about various types of transactions and dealings between individual farmers, farmers and landowners and the state, detailing landownership and area, crops and revenues due. More importantly, the *kaditas* are also a socio-cultural product reflecting the social, administrative and legal functioning of a local society, namely the village, in a state system. They fall into six broad categories on the basis of the indigenous categorization mentioned in the title page of each volume.

> 1) Daily Account Books (*Dinavahi Ooliga*) - 78 volumes. These volumes comprise a daily record of all economic transactions relevant or revenue collect, agricultural administration and investment including: daily instalments of various cess, taxes and *kandaya* (cash revenue installments) remittances, expenses

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[6] See for example, Burton Stein, a) "The Segmentary State in Africa and Asia". *Comparative Studies in Society and History*, Vol.30;1, January 1988, pp. 52-82, b) "State Formation and Economy Reconsidered", *Modern Asian Studies*, Vol. 19;3, July 1985, pp. 387-413 and, c) *Peasant State and Society in Medieval India* (1980), Oxford University Press, New Delhi. See also, James Heimann, "State Formation in South India, 850-1280". *Indian Economic and Social History review*, Vol. 24:1 (1987), pp. 35-61. Herman Kulke, "Fragmentation and Segmentation versus Integration? Reflections on the Concepts of Indian Feudalism and the Segmentary State in Indian History". *Studies in History*, Volume 4:2 (1982), pp. 237-54.

[7] The following description is based on previously published material. See for example, Neelambar Hatti & James Heimann, a) "Yelandur Kaditas; Village Account Books and the Study of Agrarian Relations in Mysore State 1806-68", *NIASnytt*, No. 1 (1993), b) "The State and Local Revenue Administration in South Indian History", *Lund Papers in Economic History*, No. 25 (1993), and c) Hatti, Heimann and Satyapriya, "Yelandur Kaditas and a Critique of the Survey Settlement in Mysore State", *South India Studies*, Vol. 1;1, January 1996, pp. 111-135.

[8] A j*aghir*, a landed estate, was a type of feudal land grant given by the sovereign in South Asia. A *jaghir* was a village, collection of villages, or district the governance and revenues of which were assigned to an individual (known as a *jaghirdar*), usually in consideration of some service rendered or to be rendered. It developed during the Islamic rule era of the Indian subcontinent, starting in the early 13th century.

[9] These books were kept by shanbogs, village accountants, in Karnataka. Thomas Munro, when he was the Collector of Kanara in 1800, called them 'black books' because of their characteristic black covers. See Neelambar Hatti & James Heimann (1993), *NIASnytt*, op.cit .

for labor in the maintenance of irrigation works and public buildings, donations to charity and temples, etc. Each entry includes the name of the individual.

2) Daily Account of Toll, Taxes and Octroi receipts (*Sunkada Pairu Babalru Ooliga*), 5 volumes. These are collected and entered daily against the name of the individual on whose behalf the payment is made and the individual making the payment.

3) Annual Abstract of Revenue Demand or Revenue Assessment (*Prajey Saagina Kulavaaru Varga. Sthalada Prajey Parasthalada Prajey Saha*), 50 Volumes. This category comprises entries relating to the 'normal' or 'standard' revenue assessments (*praku kandaya*) and the actual revenue demand. Deviations of the current year's assessments from the 'standard' assessment are enumerated in detail; the 'actual' revenue demand is deduced therefrom.

4) Annual Abstract of Revenue Receipts (*Sthalada Prajey Paraslha/ada Prajey Saha Hana Yam Bandudakke Kuluvaru Drundu Varga*), 65 volumes. This category refers specifically to the 'actual' demand entered in the previous category and its collection. The individual assessed in the previous category is entered here.

5) Crop Output Account by individual crops (*Pairu Hultuvaliaga* together with the installments of collection of *kist*), 18 volumes. This category mainly consists of accounts relating to sugarcane production in one village, namely, Ambale.[10]

6) Biligiri Ranga Swamy Temple Accounts, 11 volumes.

As pointed out earlier, the *kaditas* also contain important information concerning legal disputes over economic resources, as well as issues of social and communal life settled by the village *panchayat*. The process, including the final decisions, enable us to construct a picture of pre-colonial South Indian society and culture from the vantage point of its own legal administration.[11] This reconstruction is, however, dependent upon an understanding of the legal order in which they are embedded. They comprise three distinct levels: local adjudication, the legal sources/*dharmasastras*, and the authority and legislative potential of the state manifested in the king. The specific configuration of how these three factors balance, support, and delimit each other specify the nexus in the creation and maintenance of society's legal order as replicated in most of South India with variations upon the basic theme.

Java: The Archive of Yogyakarta

Under the joint name *The Archive of Yogyakarta*, the two volumes draw upon the contents of four unpublished Javanese manuscripts – British Library Additional Manuscripts nos. 12303, 12341-2, and l4397 (hereafter BL. Add. MS.) – taken from the Sultan's palace after its fall to the British expeditionary forces on 20 June 1812. The manuscripts are written on European, Chinese, and Javanese tree bark paper (*dluwang*) in the Javanese script characteristic of Central

[10] Almost each page appears much like spreadsheet and consecutive columns mention the name of the farmer, village, area under sugarcane, quantity of juice pressed, amount of jaggery (raw sugar) derived as well as its quality. To this day Amble is known for its sugarcane cultivation and jaggery production.

[11] For example see, Hatti and Heimann, "Miscreants, Fines and an Inter-Caste Love Story; Social and Cultural Themes in the 19th Century Yelandur Kaditas, Karnataka, India" in Eichinger Ferro-Luzzi (ed), *Glimpses of the Indian Village in Anthropology and Literature*, Istituto Universitario Orientale, Naples, 1998.

Java. In general they constitute an unknown part of official court documents (Section I, II and IV), as well as what appears to be notations of actual economic holdings (Section III). The latter are not uncommonly, scratched-out, rewritten, and otherwise tampered with. Whereas volume I (Carey 1980) reproduces selected documents in order to provide insights into the political and internal affairs of Central Java during the last decades of the eighteenth century and the first of the nineteenth, volume II takes a different approach. Due to the predominance of economic documents in *The Archive of Yogyakarta* as a whole, it takes as its point of departure the fact that they constitute an 'archive' in the professional sense of the term. They are governmental records produced by day-to-day activities of the Yogyakarta sultanate between I771 and 1812. While the documents can be dated in the period they by no means cover the period equally or in any known order, having been subsequently bound together, randomly it would seem, to form the present-day manuscripts. In accordance with a rendering of accounts outstanding on behalf of the first two sultans of Yogyakarta, the extant documents have been arranged in volume II following such a schema.[12]

A cautionary note

As noted above, the essay focuses on recovering the 'traditional' revenue assessment system prevailing in the respective regions from study of local documentation. However within a comparative method a couple of basic differences in the sources should be noted. First, while the *kaditas* are by virtue of their condition, i.e. documents written on a special type of material in local script and expressed in coded local language are difficult of access. In contrast, the contents of *The Archive of Yogyakarta* are written in standard chancellery Javanese and have been published in transcription. In short, the *kaditas* are complete as they stand. *The Archive* is a somewhat artificial product, the result of combining documents contained in four manuscripts deemed sufficiently related to constitute a unit. Be that as it may, our choice of method is based on the reasonable assumption that the contents of local documentation provide the respective order of priorities. These are dominated by an overriding concern with material commitments to king and court in the form of taxes and other extractions. Second, the *kaditas* contain an immense amount of data concerning settlement of interpersonal conflicts between fellow villagers employing a mixture of formal legal provisions and local traditions and customs. Such are lacking in *The Archive of Yogyakarta*. Yet the fact that horizontal relations binding together or conflicting with one another are not documented in the Javanese case does not necessarily

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[12] **Section I** revolves around the activities of the highest governmental functionaries, mainly the deliberations of the ruler and his counsellors in the form of appointments and royal orders, along with documents revealing legal custom, statute law, and treaties with foreign powers, after August 1811 including the British.
Section II, comprising almost one third of the total, contains registers of the distribution and location of the realm's economic resources, i.e. man and land resources temporarily alienated to officials in lieu of salary, along with adjustments in their extent, as well lists of troops, weapons, and accoutrements.
Section III contains the some of the realm's correspondence, ordered as far as possible chronologically.
Section IV, the fourth and final category, consists of a collection of unique Javanese accountancy records. They are concerned with cash flow; namely, either with deductions made directly from the income before receipt of the entire sum registered at the *kraton* for use there or for subsequent disbursements.

mean that such were lacking. That such horizontal relations, possibly best illustrated in legal cases, existed in Java is attested to their presence in numerous reports of the Dutch East India Company. Again due to the manner of recording, they have been preserved in documents from West Java, which until 1688 a colony of the Central Javanese kingdom. It seems highly likely that these horizontal relationships were equally characteristic of Central Java.[13]

The revenue systems

South India

Whatever state formation that had existed in South India, the economic map was viewed (and functioned) as a hierarchical branching network of revenue nodes.[14] In them, particularly at the lowest levels, actual transference of produce and revenue was effectuated by merchants and mediated by accountants with their record books. At each level of aggregation in a hierarchy of nodes, funds were negotiated on the basis of politics and power. It was the ability of the lowest levels, the *shanbogs* (village accountants) and their *kaditas*, to operate almost independently that underwrote the state, regardless of whatever political administrative organization was imposed or negotiated. This gave a measure of flexibility to the types of state formations that could and did exist.

Thus the *kaditas* enable us able to tackle a substratum of Indian economic history which even the use of *jamabandi* (land revenue reports) has not reached; namely the level at which administrative and political appropriation of 'surplus' was actually realized. We have to bear in mind that appropriation from the villages has always fed whatever system, dynasty or person was in power in India. Therefore agriculture had to be controlled. While systems of power politics could traditionally be left in flux (see below) continuity in the control over direct producers had to be stable. *Shanbogs* as part of the internal administration of villages and their revenue had an important role to play in keeping this stability.

In general the state in South India organized its administration on the basis of overlapping principles. As the crux for both the British and in the modern Indian state the administration was organized on the principle of 'area managers.' Their main concern was with the collection of revenue, which of course implied keeping the peace and influencing and encouraging production. This quasi-bureaucracy was not based on tasks but rather on control over a definite geographic unit; tasks were derivative of control and revenue collection. Moreover, control was oriented towards next highest node of revenue appropriation. Actual implementation of this system was always dependent on negotiation.

The state as a political and administrative unit, did not form a continuum of administrative legality. The cement between political and economic levels was based more on bazaar-like bargaining than a formal framework. There were rules to the game, determined in part by Hindu

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[13] It must be emphasized that these concerns are not symmetrically divided between South India and Central Java. Horizontal relations in the form of autonomous functioning of the basic village unit built around the *panchayat*, tends to characterize local society of South India and perhaps other areas as well. In contrast, vertical relationships stand out most predominantly within the Central Javanese context, a phenomena supported by studies of both West and East Java during earlier epochs.

[14] Neelambar Hatti and James Heimann, (1993), *op.cit*.

and/or Muslim ideas of statehood and property or the right way, *dharma* if you will, forming the basic model which generated each of the states and each of the agrarian systems. The unity of the state as *janapada* (the king's domain) was, however, continually emergent and held together by ethos, power and economic bargaining.

At each of these levels of aggregation the functions and corresponding office (whatever they may have been called) of *shanbog* and *gauda* or *partil* (village head) could be found. The interplay of the royal system of sovereignty and *fitna* and local ambitions of *gauda* and chiefs together with their regional and political aggregates constituted the body of politics and the administration of the realm. Legitimacy of authority and appropriation could come from the sovereign or from the regional aggregate.[15]

Here one can discern discrepancies between the contents of the *kaditas* and the Settlement imposed by the British raj. The *kaditas* continue a revenue tradition formalized by Chikka Deva Raja, the Wodeyar king of Mysore, during his reign between 1673 and 1704. On the basis of his perception of the Mogul administrative organization, he reorganized and formalized what had been the traditional revenue administration of Mysore state.[16] Moreover, the administrative, economic, and social functioning of the Yelandur *kaditas* indicate that the *jaghi,* well up to the end of the 19th century, was administered on indigenous precolonial principles and minimally influenced by the British. Despite the existence of a revenue system sanctioned by time and usage, the Revenue Survey created by the British raj was not convinced of its authenticity or, more important, accuracy. In order to 'correct' what was seen as shortcomings an investigation was instigated on the request by the *Jaghirdar* (head of the *jaghir*), one which produced the Survey Settlement of February 1889. Colonel J.P.Grant, Superintendent of Mysore Revenue Survey, submitted his proposals for the revision in September 1894. Some of the observations made by Col. Grant on the revenue administration of the *jaghir* prevailing at the time merit a detailed examination. These observations provided a justification for implementing the proposed revision of the assessment.

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[15] It could come from the temple or *Mutt* (a religious centre as these were all participants of a common moral universe which pivoted on the sanctity of the Brahmins, the *sacral nomos* of the anointed king transferable to smaller kings and chiefs and indirectly to other members of this universe.

[16] Chikka Deva Raja reorganized his state apparatus on the model of the Mogul court into eighteen departments and published extensive and detailed instructions to be followed at each level of the revenue administration, as well as rules for good conduct and *dharma*, right down t the level of village accountant and individual farmer. Wilks was the first to give an account of these administrative 'innovations'. See Mark Wilks, *Historical Sketches of the South of India in an Attempt to trace the History of Mysore*, 2 vols., London: 1810, reprinted with notes by Murray Hammick, 1930, vol. 1. See also Ramakrishna Rao, *Annals of the Mysore Royal Family*, parts I & II, pp. 17-155.

1. Based on the **'***maganiwar'*[17] old assessment per acre, derived by placing the survey acres against the old collection, under different types of land, Grant observes that 'the average rates hitherto paid on both wet and dry lands, as ascertained by placing the newly ascertained survey area in juxtaposition with the collections under each head, are not only very low, for so rich a tract, but present great inequality.'[18]

2. 0n the past revenue assessment he says, "In the absence of any reliable definition of area, there has been no sound base of revenue management and the incidence of assessment has been very unequal" [19]

3. He goes on to observe, **'**I have not been able to ascertain, nor does it much matter, by whom the present assessment was fixed. It has remained unchanged since the Jahgir was granted. The revenue has been very inelastic and there has been scarcely any increase....**'** [20]

4. Again on the question of equality, Col Grant points out that **'...**the chief fault of the old assessment is its unequal incidence although, as a whole, it has been extremely moderate**'**. This inference he draws from the comparison of a few typical instances of the average rate per acre of wet and garden lands in different localities in the *taluk*. He concludes; **'**In short the variations of assessment cannot be justified on any grounds whatever. Under such circumstances it will be readily understood how any equally distributed assessment, based on careful classification, will disturb the old state of things and also how much room there must be for legitimate and almost unavoidable increase of the existing assessment**'**.[21]

Survey Settlement and the Kaditas

Col. Grant's proposals for the revision of revenue assessment of Yelandur *jaghir* are motivated by what he saw as defects. These included: a) an unchanging assessment, b) absence of any reliable definition of area resulting in arbitrariness of fixing the assessment, and c) inequality in the incidence of land revenue. Our critic of Grant's observations is bases upon the contents of the third category of the *kaditas*, namely the *Prajey Saagina Kuluvaru Varga* or household-wise revenue assessment pertaining to Amble village for two years namely, 1849-50 and 1855-56.[22] Both volumes refer to Amble village.

Village: Amble, Year; 1849-50 (Sawmyanama Samvathsara)

Usually the title page of a *kadita* gives the name of the village (main village's name if it has other villages attached to it for administrative purposes), the number of irrigation tanks and canals serving the village, the names of smaller villages or hamlets attached to the main village, and the category of the *kadita*.[23] The relevant entries as they appear in the *kaditas* are followed by an analysis of the information contained therein. This volume records:

1. Name of the head of the household.
2. Number of ploughs.

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[17] *Magani*, also termed *Hobli*, is a revenue subdivision of a *taluk*.
[18] Proceedings of the Government of Mysore, *Revenue*, dated 16 February 1896, p. 12.
[19] *Ibid*., p.12.
[20] *Ibid*.
[21] *Ibid*., p. 13.
[22] The corresponding Hindu calendar years are *Sowmyanama* and *Rakshasanama samvathsaras* respectively.
[23] Amble was served by one irrigation tank and one canal leading from the *Suvarnavathi* river (or *Honnu Holey* as it is locally known: *Honnu* = *Suvurna* or gold and *Holey* = river). The river was an important source of irrigation and drinking water. It was perennial and the fertile alluvium it carried along with it enriched the soil.

3. Normal or standard assessment (*Praku kandaya*)
4. Deviation of the current year's assessment from the normal or standard assessment.
5. Reasons for and extent of deviation (if any). These details relate to factors like changes in the land area and in the type of land cultivated, loss of crop due to lack of sufficient water, excess water flow that are specific to individual plot of lands, etc.
6. Final assessment for the current year.

Dry Land Cultivation

1) Type of land: black soil/red soil. 2) Quality: Each type of land is further categorized into four grades according to the quality of soil and other factors. 3) Whether cultivating for the first time.[24] Against each category of land under each type is given its extent in a conventional unit of measurement and its revenue assessment. The assessment of category/type of land is totalled at each stage and the assessment of each type of land is totalled at the next stage.

Wet Land Cultivation

In the case of wet land cultivation there appears to be two distinct types, namely land cultivated as a *kandayagadde* where land revenue is assessed and paid in cash, or as a *varagadde* (*vara* means crop sharing) where a part of the yield is paid as revenue or 'rent'. (The same individual could cultivate one or the other or both). In the former case land revenue is assessed on a fixed monetary basis, whereas in the latter case the revenue/rent is fixed as a proportion of the produce and paid in kind. *Kamiayagadde* had no assured source of water supply as distinct from the *varagadde*,[25] which had an assured supply for irrigation from a reservoir, tank, or canal built and maintained at public cost by the state. In various kaditas these broad categories are subdivided into numerous subcategories, all depending on the actual supply or potential supply of water.

As in the case of dry lands, the wet lands are divided into four grades according to the quality of soil and the source and type of irrigation for each. Land area is measured in terms of *bijawari* or the sowing capacity and as *khandugagadde*. The quantity of seed required to sow one *khanduga* land is also mentioned against each plot of land and corresponding revenue assessed. Plots cultivated more than once during the same agricultural year are counted twice for assessment of land revenue. The assessment rate for plots with two crops was the same for the first and second crops in the case of *khandaya* lands. In the case of *vara* lands, for the second crop the share was three-fourths of the share fixed for the first crop.

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[24] A plot of land owned/cultivated by an individual is identified even today not by its revenue survey number but by the local name it has acquired over a long period of time. In fact, such an identification can be easily and reliably used to determine the changes in the land holdings of individuals over time. It is interesting to note that each plot of land had an identification - either acquiring a name by its location or in relation to the name of an earlier owner or cultivator. This manner of identifying a plot, which is very much prevalent even today, is closely akin to the number assigned to each plot in the Survey Settlement.

[25] As far as the revenue assessment of individual cultivators is concerned, the *varagadde* is excluded from the calculation since assessment of such lands is to be paid by the owners of the land, the *jaghirdar* or cultivator, as the case maybe. In fact, the *jaghir* lands cultivated directly or through different types of tenure arrangements are also assessed separately.

Miscellaneous items of assessment

These cover taxes (*kandaya*) on cultivation of tobacco, sugarcane, coconut palms and taxes (*sunka*) on house, occupation (barbers, blacksmith, weavers, etc,), ploughs, black soil and such. While black soil dry lands were liable to pay *sunka* of a prescribed amount, in the case of red soil an additional tax for the straw was levied. The latter is shown separately under each category of land. Tax on black soil (*Yere Sanka*) was calculated for the entire extent and shown separately under 'miscellaneous taxes'. The total assessment or revenue demand for each household or 'taxpayer' for the current year is the sum total of the revenue/taxes under the various heads.

Unchanging settlement?

The 1849-50 volume is different from the other volumes under the same category for different years. It is here we find evidence of a change in the assessment to a more rationalized basis as regards both the base and the rate. While the assessment hitherto was based on the conventional measure of the land area, either by actual measurement or on the *bijawari* basis, from this year onwards the revenue assessment base was apparently changed from the traditional unit area to square yards. However, the conventional measure of land continued to be used probably because it helped ready identification of plots. In the 1855-56 *kadita bijawari* measures predominate again and the new land measure is rarely found.

The volume records the revision of assessment in 1849-50 for all categories of lands. These revisions were based on actual measurements. It is in this particular context we come across the term *paimayisi* meaning 'surveying and measurement of land.' While providing the specifics of cultivated lands along with other details mentioned earlier, the extent of each piece of land is given in terms of yards. The actual measurement of the plot in yards is noted first, followed by the total area of the land in square yards. The irregular corners of the land are measured separately and taken into account. The next step in the calculation of the total area is interesting. The total area in square yards is converted into units and the total area of the plot expressed in these units of 1024. This was done for the simple reason that 1024 was the base of the land revenue assessment.[26]

In addition to the new assessment, the earlier assessment or more precisely the 'normal' or 'standard assessment (*praku kandaya*), is also mentioned. Wherever the prevailing rates were lower than the new rates they were revised upwards accordingly. Interestingly, when the prevailing assessment was higher than the new rates, then the former rates were continued. In other words, while efforts were made towards an upward revision of the assessment there was no downward revision. We can only conclude that the *jaghirdar* was more interested in maximizing revenue.

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[26] It is intriguing as to the logic for using this particular figure which does not fit into any of the British or metric units of measurements.

During 1849-50, the assessment, on an average, was raised by nearly 47%, varying from 20% to 66% for the different categories of land. Table I shows the old and new assessment rates by type and category of land.[27]

Notably the total revenue demand for the households registered in the 1849-50 kadita increased by nearly 47%, from about 318 to 466 *Cantarai Pagodas* (C.P.).[28] More specifically, the increase in the case of wet lands was nearly 20% and for dry lands about 66%. Within the total increase of the revenue demand the contribution from the dry lands was
83%, and only 17% from the wet lands. Despite a higher rate of assessment on wet lands this is so for two reasons. First the proportion of irrigated lands in the total area assessed was only 31% and second the wet lands were already assessed at a relative high rate and thereby not giving much scope for further increases. Yet another reason might be the realization of the increasing value of dry lands in the expanding and profitable cotton and silk cultivation.[29] Whatever the difference in the assessment rate between wet and dry lands, it narrowed down considerably after the revision.

The data from the *kaditas* presents us with a conundrum. On the one hand, Col. Grant's observation with regard to the unchanging rates of assessment prior to the introduction of the Survey Settlement in Yelandur *jaghir* in 1894 is untenable. The 1849-50 *kadita* affords enough evidence to refute the claim of unchanging revenue assessment in the *jaghir*. On the other hand, there is just as much evidence that on the whole the revenue assessment of the *jaghir* and its component *maganiwar* and villages remained remarkably stable. Again, according to the original deed, Yelandur *jaghir's* gross revenue return was evaluated at 11,800 *Cantarai Pagodas*[30] and the expenses of running the *jaghir* 1732 C.P. The net revenue was 10,147 *Star Pagodas*. Wilks notes that revenue returns from Yelandur at the beginning of the 19th century was 10,000 C.P.[31] By 1831 the revenue return of the *jaghir* was 17,164 C.P. The Survey Settlement Report notes that from 1861 onwards right up until the early l890‘s the revenue return was around Rs. 35,000 with small variations. At the rate of 3 rupees per Cantarai Pagoda,

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[27] We are grateful to Dr V.S. Satyapriya for providing us with tables I, II and III.

[28] However, the households and lands noted in this *kadita* cannot be the sum total of all households and lands for Amble village. Among other reasons, the original *sarvamanya* deed of Yelandur *jaghir* notes in 1807 that Amble was assessed at some 1800 C. P, and moreover, in the 1855-56 *kadita*, which is also incomplete, the total assessment of households is reported as 700 C. P.

[29] Charlesworth has shown that local agrarian economies were sensitive to world economic trends of the 19th century. He cites the example of cotton production in South India which responded to changes in American cotton production during the Civil War period. See Neil Charlesworth, *Peasants and Imperial Rule; Agriculture and Agrarian Society in the Bombay Presidency, 1850-1935*. Cambridge University Press, 1985, pp. 135-137. In Yelandur Jaghir, however, the trend in the expansion of cotton and silk cultivation began in the early 1840s. Whether this was in response to an increasing demand in the external markets needs to be looked into. It is probable that the general increase in prices of certain agricultural produces which began in the 1840s could explain the expanding production of cash crops such as cotton and silk.

[30] The assessments are presented in *cantarai varahas*, equivalent to *cantarai pagoda*, the currency widely used in the official records during the period of reference. The abbreviation used in the kaditas to indicate this is *kangu*. One *cantarai varaha* is equivalent to about Rs. 3. Another unit in circulation was *Star Pagoda*, equivalent to 31/2 rupees.

[31] Mark Wilks, *op.cit.*

not only had the revenue return remained remarkably stable but had at times, 1831 for instance, been higher than the one noted by the Survey Settlement.

Table I. Average rates of assessment of land revenue. 1849-50. Amble village

Type & Category	Revenue Assessment per Unit of Area			
	Old Assessment		Revised Assessment	
	Traditional Measure (in Acres)		Traditional Measure	
I. Dry land				
A. Black soil				
Category I	0.020	0.54	0.036	0.94
Category 2	0.020	0.47	0.035	0.83
B. Red soil				
Category 1	0.0 16	0.56	0.019	0.69
Category 2	0.012	0.54	0.011	063
All types and categories		0.45		0.74
II. Wet land				
A. Black soil				
Category 1	1.152	0.82	1.308	0.96
Category 2	1.192	0.62	1.587	0.96
Category 3	0.851	0.48	1.433	0.81
B. Red soil				
Category I	1.298	1.17	1.300	1.17
Category 2	1.175	0.89	1.234	0.93
All types and cateories	1.131	0.72	1.354	0.86

How are we then to interpret this conflicting data, namely an overall stability in revenue returns over quite a long period and local variations as noted in the 1849-50 *kadita*? One possible explanation might be that this revision occurred only in Amble village and not in the rest of the *jaghir*. This explanation is not as farfetched as it might appear. For most of the early 19th century, Amble village seems to have been administered as a separate sub-estate - a sort of a *jaghir* within the *jaghir* - which eventually came into the fold of the *jaghir* as a whole.

As mentioned earlier, the assessment was fixed for each plot of land taking into account a number of factors. This is evident from the above table. This was so in both the old assessment and in the revised assessment. The average old assessment for wet lands (all class of lands pooled) was 0.72: it varied from 0.82 to 0.48 in the case of black soil and from 1.17 to 0.89 for red soil. In the revised assessment it ranged from 0.96 to 0.77 for black soil and from 1.17 to 0.93 for red soil with the average for all lands being 0.86. Whether one adopts a conventional method of measuring the land or a standardized scale the results appear to be the same. In such a practice of determining the assessment on individual plots of land one may suspect an element of arbitrariness. This may arise from an error in assessing the quality of land and not necessarily

from a bias towards a certain class of cultivators. In the former type the error would be uniformly distributed irrespective of who owns the land.

We have also examined the distribution of landholdings to ascertain the extent of land concentration. This is done through the statistical measure of Gini coefficient.[32] The data is presented in table II. As can be seen from these figures, the land distribution is somewhat skewed. This corresponds well with our findings concerning mean and total revenue paid by different castes in the 1855-56 *kadita*. Out of 168 households noted therein the six *brahmin* households' mean revenue was 8.65 C.P. and the highest revenue paid by any one household was 20 C.P.

The dominant caste, the Gaudas, with 46 households had a mean revenue of 9.2 C.P. with a maximum of approximately 27 C.P. and a total of about 326 C.P. The overall mean revenue for the 168 households was 6.08 C.P. and the total revenue paid was about 724 C.P. It is not surprising that households and groups paying more revenue owned more land. There is little evidence in this for any assumption of inequitable revenue rates - quite on the contrary. What we may assume is that the dominant caste and the *brahmins* probably appropriated for themselves the best lands, particularly wet lands.

Table II: Inequalities in land distribution in Amble Village, 1849-50 and 1855-56.

	Gini I	Gini II	Gini III
1849-50			
Wet lands	-	0.38	0.41
Dry lands	-	-	0.39
Total	-	-	0.44
1855-56			
Wet lands	0.44	0.44	0.33
Dry lands	0.54	-	0.33
Total	0.49	-	0.36

Note: Relates only to plots of land for which acreage figures could be obtained.
Gini I and Gini II are based on traditional measure of land area while Gini III is based land holdings in acres.

Inequality in the incident of land revenue

As a final test of the Survey Settlement's assumption of inequality, we have used the data from the I849-50 *kadita* to test whether changes in revenue rates or units of land measurement indicate greater inequalities in revenue assessment. If not, we might conclude that it was the specific perceptions or methodology of the Survey Settlement which led to the complaint of

[32] The Gini Coefficient rakes values from absolute equality (0) to absolute inequality (1) in the distribution.

inequality in assessment.[33] The coefficients are calculated for a) assessment based on the conventional system for land measurement on which the rates are determined and b) the rationalized system (acres) for the old and revised rates, for different classes of land. The results are presented in Table III.

It is evident that the coefficients are quite low and remarkably stable, thus indicating the absence of inequality in the incidence of revenue assessments. It may be noted that by simply converting the base of the assessment from one unit to another unit of measurement the inequality in the incidence changes. For instance, the fact that the values of Gini II are higher than those of Gini I the change in revenue rate does indicate some slight increase in inequality as in the case of Gini III and Gini IV where the new land measure based on units of 1024 sq. yards has been used. Note, however, that there is less difference between Gini I and Gini III, and Gini II and Gini IV than between Gini I and Gini III or Gini II and Gini IV. This would lead to the conclusion that changing rate of revenue assessment had a greater impact on inequality than any change in the unit of land measurement. This should not be surprising. As noted above, in the revisions indicated by the 1849-50 *kadita*, certain dry lands were assessed higher than previously. Relative distribution of revenue assessment was shifted, which led to a

Table III: Incidence of Land Revenue
Old and Revised Assessments, 1849-50

Land type and category	Gini I	Gini II	Gini III	Gini IV
I. DryLand				
A. Black soil				
Category 1	0.038	0.047		0.007
Category 2	0.051	0.117		0.004
B. Red Soil				
Category 1	0.058	0.099		0.042
Category 2	0.078	0.108		0.059
All types & categories		0.283		0.148
II. Wetland				
A. Blade soil				
Category 1	0.085	0.192	0;092	0.109
Category 2	0.098	0.178	0.144	0.098
Category 3	0.214	0.189	0.160	0.106
B. Red Soil				
Category 1	0.033	0.080	0.034	0.081
Category 2,	0.076	0.144	0.109	0.107
All types & categories	0.131	0.247	0.132	0.143

Notes; Gini I — Old Measure of Area and Old Rates
Gini II — Old Measure of Area and Revised Rates
Gini III — New measure of Area and Old Rates
Gini IV — New Measure of Area and Revised Rates

marginal increase in inequality seemingly unconnected with any shift in the unit of land measurement. The contention of unequal incidence of the old assessment in the Survey Settlement proposals has no basis and is unrelated to the way land had been measured and assessed.

Summary

The inferences drawn by Col. Grant on the revenue system in the precolonial period in Yelandur *jaghir* are, thus, unsupportable. Revision of the land revenue assessment took place in the *jaghir* decades before the Survey Settlement was introduced in 1894. Regarding the 'reliable' definition of area for fixing the assessment, one needs to understand the basis for fixing the assessment. Was it the *area* or the *output* that could be realized from a given piece of land that was crucial for determining the assessment? The *bijawari* concept can be seen as a proxy for the area or for the output. Depending upon the type and quality of the soil, the seed requirement would differ. Given the quality of land (category to be precise) the *bijawari* would not differ much. Secondly, if this concept is used as a proxy for the expected output, the higher the level of seed rate higher the output. Hence this is used as a basis for the assessment. However the possibility of error in judgement cannot be ruled out. But such errors would be more random in nature than purposive. Our analysis has shown that regardless of the concept is used the determination of assessment was not arbitrary. As mentioned earlier, though the land area was measured and expressed in terms of yards, the conventional measure continued to be used.[34] The point that needs to be investigated here is why for some years the area of each plot is recorded in the other *kaditas* for different years in terms of square yards. With regard to the incidence of assessment, the low and remarkably stable Gini coefficients indicate the absence of inequality of any significant order.

Our demonstration that the *bijawari* system of land measure was accurate regarding an equitable determination of both land size and revenue assessment could help to eliminate another British assumption. This was the 'inaccurate and fraudulent' nature of the revenue administration which they intended to set right by the survey settlements. The key is the paradox of the 'missing' lands. Several district manuals had repeatedly noted that while the kaditas were consistently and logically maintained, traditionally the size, and to some extent the quality, of land holdings were just as consistently under-reported by about 50% and that this under-reporting tended to favour the village power-holders.

The 1894 Survey Settlement of Yelandur claimed that according to the old records there were 9,249 acres of dry lands and 3,735 acres of wet lands, a total of 12, 984 acres (equivalent to a *bijawari* of approximately 2,600 *khandugas*), while the new 'scientific' survey had measured Yelandur to contain 15, 386 acres of dry lands and 5,531 acres of wet lands, totaling 20,917 acres. As we have noted elsewhere, the conversion of *bijawari* measure to acres by the British was based on a simplistic formula which failed to take into account that in the *bijawari*

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[34] It may be interesting to note that even today the farmer gives the extent of land cultivated by him either in terms of the area that can he plough by a pair of bullocks in a day, particularly in the case of dry land or in terms of *khanduga/kalaga* in the case of wet land rather than in terms of acres.

concept of sowing capacity the physical extent of land, *khanduga*, depended upon a variety of factors connected with the productive potential of the land. Hence, conversion of *bijawari* into acre must be based on an 'elastic' conversion principle which would result in a larger acreage if the land was poorer and a smaller one if the land was better. Perhaps this would explain the lands which, according to the British, were '*missing'*.

The evidence drawn from the *kaditas* has brought out certain basic features of the land revenue system and its administration during the pre-colonial period. Historically, Yelandur was the seat of a Chola principality, which subsequently came under the influence of the Vijayanagara empire. The revenue administration of the Vijayanagara empire was '…executed to improve the revenue of the empire gradually in yearly amount without distressing the inhabitants'.[35] It may be relevant to note Salatore's observations.

> We may not be far wrong in affirming that the Vijayanagara rulers must have secured the tradition of revenue administration from the Tamil kings, although in Karnataka proper they undoubtedly profited by the system of Chalukya monarchs.[36]

Thus, on the basis of the foregoing analysis it can be hypothesized that the laud revenue system and its administration in South India with particular reference to Yelandur *jaghir* was based on principles of equity.

Looking at the 1894 Survey Settlement of Yelandur we might say that 1894 was the year when the system depicted in the *kaditas* effectively stopped functioning. In a sense, a discussion of it puts the foregoing centuries into a clear perspective and makes us marvel at the intricacy, consistence and continuity of the *kaditas* and could even contribute to our understanding them.

Central Java

The revenue assessment of traditional Java did not appear to have been as sophisticated as that of South India. 'Appear to have' is warranted because the documents constituting *The Archive of Yogyakarta* lack the detailed data of the *kaditas.*[37] From available information, however, it can be concluded that the revenue system was dominated by ties existing between the holders of power at the center, i.e. the court of Yogyakarta, and the direct producers in the periphery. The latter resided in what would become under the Cultivation System (1830-70) 'villages' in the sense of economic and administrative units.

Key to interpretation of the top-down component, i.e. what the elite grantees received from the crown are the contents of more than fifty appointment letters dating between 1786 and 1811. Through these official letters, many affixed with the Sultans' royal seal, the primary

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[35] Lewis B. Rice, *Mysore and Coorg: a Gazetteer compiled for the Government of India*. 2 volumes, Bangalore, 1877. Vol. 1. p. 471.

[36] B.A. Salatore, *Political and Social Life in the Vijayanagara Empire*, 2 Volumes, Madras, 1934. Vol. I, p.l62.

[37] The fact that different tax rates were applied to differing lands indicates that other factors were taken into consideration, factors most likely akin to those found in the *kaditas*.

grantee was raised to a position of prominence, with appropriate name and title. In lieu of a salary the grantee was assigned a number of economic units as 'appanage', as were his subordinates. Appointment letters throughout the period covered by *The Archive* (1771-[38]1811) consistently measure the units granted in manpower units. A specific number were granted in the named villages. For example l to 20 units are listed for village A, ditto for village B, and so on. A grantee could thus be assigned up to 1000 man power units in dozens of villages scattered over several provinces. At the same time, each village counted resident direct producers bound by ties to differing lords. Should they engage in armed hostilities, more the rule than the exception during the pre-Gianti Treaty (1755) period, then villages would be divided into several camps with each group of direct producers drawn into competition for power following their bond with respective overlords. Thus the main organising principle of Javanese socio-economic relations consisted of vertical ties linking *priyayi* (= *para yayi*, group of younger brothers (of the sultan)) at the center with locally-based direct producers. Horizontal ties, such as those of village, clan, or kinship so crucial in the *kaditas* were subordinated to vertical ones.[39] Key to the bottom-up component, i.e. what the crown received in exchange, can be recovered from analysis of the Appanage Adjustment documents, but only after coming to terms with a characteristic ambiguity between units of manpower and those of land power.

Man power

The usual pattern in *The Archive's* appointment letters is that the relevant royal letter raised the grantee to a higher official position (*sinengkakaké ing aluhur).* He, as well the unique case of a female relative of Hamengkubuwana I, was promoted to a higher status with appropriate name and title, as well as privileges belonging to that status. More to the point here, as part of the promotion quantities of production units associated with various villages were aliened in favour of the appointee. The appointment of Kyai Mangundipura provides one of the earliest of such grants. Mangundipura was one of the key administrators of both sultans until his retirement in 1811. The pattern of appointments accompanied by grants of units of production measured in man power continues throughout the period covered in *The Archive*, that is down to 1811 and the British occupation.

Tumenggung Mangudipura's appointment, 9 November 1786 (Archive I:8-10)

> ... the reason Mangundipura is given My (royal) letter: he is raised up from a low status and promoted by Me to the higher status of *Bupati Jero* (Inner Bupati) to be the assistant of Adipati Danureja [the

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[38] *lunggah ngoko linggah ngoko &. kromo, lenggah kromo inggil*, means literally to sit. See Robinson & Wibisono (2002), [hereafter R & W].

[39] The observation gives rise to interesting research issues. For example, how does the prevalence of vertical relations tally with observations in the late 19th and early 20th centuries, even up to the early days of the republic, of local-centric activities as self-help organisations (*gotong-royong*), annual redistribution of lands to achieve economic equality among nuclear villagers, rituals designed to strengthen the solidarity of the local unit (*slametans*), and so forth? As none of these has so far been documented before the advent of Dutch influences in the 19th century and many are still touted as the basis of 'Indonesian (read Javanese) socialism', the problem remains of when, how, and why this element of 'collectivism' came into Javanese local society.

> Patih or Prime Minister]... his name remains Tumenggung Mangundipura. He is bequeathed all the accoutrements and raiment of a *bupati* under the *patih*. In appanage he is given in villages (*bumi desa*) one thousand one hundred *gawé ing wong*, these are the names of the villages… [These are supplemented by a 300 *cacah gawé wong* assigned as appanage for eight subordinate *mantri*]
>
> In Pasèkan [village] 4 *gawéning wong*, in Jethis 4, in Tumuwuh 4, in Sumber 8, in Kawedhèn 8, in Barcak[40] 8, in Kalipakis 12, in Ledhok Kembangarum 8, in Kabenikan 4, in Genitem 4, in Gresa 2, in … …, in Kalurahan 4, in Kabangan 2, in Sulur 2, in Kacandhèn 1, in Girinyana 25…[41]

'*Cacah'* by itself means merely 'number, amount' (R&W, 2002). In much of historical materials, especially in Dutch East India Company records, the full phrase '*cacah gawé wong'*, *cacah wong* (number of persons), '*cacah somah'* (number of households), etc, has been shortened to '*cacah.'* More to the point, *cacah gawé wong* and its equivalent in *krama* (high Javanese = *karya, damel*) seems to be the traditional measurement for such units. The *Nagarakrtagama* of the 14th century uses a variant, i.e. *carcah*, as a listing or register (*Nag*. 77:3-4, 17:11, 3; 22:2-3), there of domains belonging to a primary estate. king on estates. Th. Pigeaud asserts that a secondary usage in olden times, i.e. early-modern Java of the western provinces, included able-bodied direct producers who were also members of the original village community. This fits with usage in the Cirebon-Priangan region of the late 17th-early 18th centuries,[42] although whether it applies only to individuals (*cacah wong*, *wong cilik*) or to households (*cacah somah*) remains unclear. A number of references from that era, mainly the Dutch East India Company records, are concerned with distribution of numbers of direct producers constituting the base of power accruing to Sultans and Regents in the Cirebon-Priangan region. There seems little doubt that at least in West Java authority (kingship/overlordship) rested primarily on the amount of manpower at the disposal of the overlord and his officials. In a manner not entirely known, these units were so strongly bonded to their superiors that it continued to apply even though they moved to another territory or from place to place.[43] A precondition for such a system is unhindered access to arable lands, a characteristic of most of Southeast Asia in precolonial times. Land 'ownership' in the restrictive meaning of conditional access was a development in the Cirebon-Priangan region resulting from the colonial intrusion.

For Yogyakarta John Crawfurd's observations concerning 'native tenure' of 1813 is only marginally helpful.

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[40] The two underlined villages are considered below in relation to the subsequent appanage adjustment document issued in 1787-88 touching on o a Mangundipura's holdings.

[41] A literal translation of *cacah gawé wong* is 'number/quantity of work by people', which are then numbered in the respective villages. Here it should also be noted that the key term in whether the appanage is granted from that controlled by the Sultan (*gadhuh*…). This contrasts with lists of units which were already part of the appointees' appanage (*lungguh/lilinggih*), in which the term '*tedha*' (given for support, lit. 'eating') of the named appointee. Apparently these appanage pre-existed the royal letter, sometimes recognisable as an earlier grant (*gadhuh*) which had become more or less permanent, alternative were part of personal possessions not under the authority of the ruler.

[42] Mason C. Hoadley, *Towards a Feudal Mode of Production, West Java, 1680-1809*, Singapore, ISEAS, 1994.

[43] They are often called *wong mantuk* or 'bird people' from their migratory life-style, which must have been based on 'slash and burn' plots or dry fields fed solely by rain water. See also D.H. Burger, *Sociologisch-Economische Geschidenis van Indonesia*, Deel I, Leiden: KITLV, 1975: 49ff on '*feudal gebondenheid*' (feudal bonding).

> Cacah calculation will be found to allude not to the actual measurement of the land, but to the number of labourers or cultivator upon it. [Moreover] … The Chachah is of no practical use in the ordinary details of agriculture or Revenue, but it is by this denomination solely that the public Registers of the lands are kept. (Mac. Pr. 21, 216).

Crawfurd's observation contains germs of veracity, but almost in reverse order. *Cacah* (here *gawé wong*) was never intended to be '…the actual measurement of the land'. As a direct translation, it was a unit of human work/production. Only after this time did *cacah* and the cadastral term '*jung'* become increasingly used as synonymous by both scribes of the time and modern researchers as well.

The case for man power

Despite the fact that control of man power seems to have provided the earliest basis of elite authority, we have little clear idea of what exactly they contributed to the economy. An unspoken assumption has been that the more units controlled the greater one's power. Numerous subordinates were useful for taking the field against rivals, forming a subsidiary of the armed forces, carrying out all the support functions of logistics, housing, fortification, and even as personal retainers. Yet for early-modern Java it remains unclear how their numbers contributed to furthering the fortunes of those to whom they were bounded. In this respect information from comparative studies are only partially applicable.[44]

Closer to home, the situation in the neighbouring Cirebon-Priangan region roughly a century prior to that considered here for Central Java is. The author's study of land-man-ruler relations in that region during the early 18th century uncovered a number of interesting facts – most of which are untouched by criticism of the Marxian framework of that work. In it the primary sources of both Dutch and sporadic Javanese ones attest attests to the strength of the ties binding man and ruler. Infringement on those ties, was seen as 'stealing' man power resources which could lead to armed conflict. However due to the presence of the Dutch

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[44] The example lying closest to hand would be that of Ayudhya's *sakdi na* system of social organization stemming from the Laws of Trilok (r. 1448-88). Although the term – a compound of Sanskrit and Thai – translates literally as 'field power', it was clearly intended to create a hierarchical order for the population of would become the Kingdom of Thailand through assigning each social level a certain number of *sakdi na*. This ranged from 5 for slaves, to 25 for ordinary peasant freemen up to the highest ministers of state counting some 10,000. The crown prince topped the hierarchy with 100,000 *sakdi na*. In theory the scale gave the respective levels the right to cultivate fields of a fixed size, again on a hierarchal scale. Regardless of the theoretical basis, it was an elaborate formal system for classifying, and thereby controlling, the kingdom's most valuable resource, namely man power. (Women were not assigned a *sakdi na* number.) Moreover, according to many modern-day blogs the basis of the system persists into the present, albeit with military connotations. See, David K. Wyatt, *Thailand, A Short History*, Yale University Press, 1984, pp. 75, 77.

A close second would be the man power system in 16th and 17th century Toungoo Burma. In their centuries-long attempts to crush Ayudhya, its kings were weakened by the shifting allegiance of man power resources. While the sovereign could 'press' men into service to the crown, especially in royal campaigns against Ayudhya as auxiliaries, 'cannon fodder', logistics corps, etc, this made the crown a unattractive liege lord. When possible, man power resources attempted to enrol under less demanding potentates, or better yet, the Buddhist *sanga* which exempted them from the king's dues. Thus the inner conflict in Burma was control over man power. The more they fled from royal servitude the stronger the centripetal forces under rival powers and the not-to-be-under estimated authority of the *sanga.* See: Victor B. Lieberman, *Burmese Administrative Cycles. Anarchy and Conquest, c. 1580-1760*, Princeton University Press, 1984, pp. 40ff.

Company's army and its expressed dislike of anything which threatened to diminish profits, such potential conflicts remained mostly verbal. Characteristically, ties binding ruled to ruler continued to prevail, even though direct producers had moved to other provinces.

But what did they remit or in other ways fulfil their obligation to their superiors? The question is not un-problematic. The Dutch sources cite a form of poll-tax is termed '*hoofgeld'*, suggesting monetary remittances. Yet here is a problem. Historically the one thing Java lacked was cash or the equivalent in rare metals. In the 'Inland agrarian' economies as that of Majapahit of the fourteenth century or Mataram of Central Java both of the earlier Borobadur period and the later one of Kartasura up to the Yogyakarta-Surakarta one under consideration, riches lay in man power. Due to the increase of inter-Asian trade the situation of the 'Costal Maritime' regions of Demak in the 16th or Banten-Cirebon in the 17th-18th centuries had more access to cash. Even so, this must have been limited to those actively engaged in trade and commerce, not the rank a file of direct producers which would seem to have constituted the lists of *cacah* bound to potentates. Alternatively remittances in the form of agricultural produce or work days could be applied to only limited geographical areas due to lack of effective transportation networks. Given the difficulties in pinning down the contents of the obligations for *cacah* to *cacah*-owner both in the case of the relatively well-studied Cirebon-Priangan area and, as we shall see, relative ambiguity of man and land measurement of authority contained in *The Archive of Yogyakarta*, the possibility that *cacah* measurements are more notional than actual cannot be discounted. That is, one wonders of the reports of economic resources held by princes and Regents of the Cirebon-Priangan region was couched in nominal terms. If so, then it would appear that the sources arbitrarily assigned a monetary value to a '*cacah'* and then multiplied this by the actual numbers of subordinates, which would have been known by the various census undertaken by princes and regents.[45] In any case it was easier to reckon the number of *cacah* than to record the actual income received at the court, minus various deductions for 'services rendered' at every level.

Parenthetically in can be noted that it was only with the incorporation of man power resources into the European-induced system of agro-industry that these resources held by the elite came into own in an economic meaning. First during the colonial period were man power resources applied intensively to 'directed' agricultural production of saleable tropical crops as indigo, sugar, and ultimately coffee. The joining of the elites' resources with the Dutch East India Company's mercantile trade network, often a monopoly at strategic points of export, and the technological know-how were crucial inputs. The latter led to improved methods of cultivation and (semi-)processing of the crops for export leading for enormous profits for the Company, some of which trickled down to the Javanese elite. This is addition to the entrepreneurial activities of Chinese and Sino-Javanese, who in cooperation with local potentates and subsequently Dutch officials 'moonlighting' through private affairs. It created a potential for entrepreneurship for those among the island's elite who were willing and able to hop on the colonial economic bandwagon.

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[45] Mason C. Hoadley, *op. cit*., Chapter 2. ′Man power resources,′ pp. 32-65.

Land power

The *jung* (ca. 7 acres or, according to Crawfurd in 1813, some 600 feet on a side (Mac #21:216)) was introduced in connection Hamengkubuwuna I's orders. Units, which in appointment letters are measured in *cacah gawé wong* for specific villages, were then termed 'taxable wet-rice lands' (*sabin paos* alt. *sabin kagungan-Ingsun*) in the same villages. Of the twenty-three 'Appanage Adjustment' documents only four are dated and those from 1787 and 1788 (*Archive* II: 190ff). The form of the 'adjustments' is illustrated in Figure 2 by selected paragraphs for those of the province of Mataram in which a half dozen of Mangundipura's *cacah gawé wong* holdings were recalibrated into *jung*.

'Appanage Adjustment'

> Memo of Pangéran Dipakusuma concerning excess royal lands in Mataram retrenched by Radèn Ngabèhi Bausasra and his colleagues, including some thirty-seven *jung* with a half-yearly tax/tribute of some eighty-seven real (see Section III, Part 1, no. 3, letter from Bausasra, undated, but probably *c.* 1786–87), (BL Add. MS. 12341, *Archive* II: 79r–83r.)
>
> …in Kulur village 12 jung, of which royal servant Tumenggung Mangundipura possessed 6 *jung*, while royal servant gamel Resawijaya possessed 5 jung, royal servant Radèn Riya Sindureja 1 *jung*, in total 12, of which 'excess' is 2, its tax is the same as 8 *jung*…
>
> …in Bercak village 4 *jung*. With royal servant Radén Tumenggung Sasrakusuma 1 *jung*, Radén Adipati Danureja ½ *jung*, royal servant of *nytura* Sasrawana ½ *jung*, royal servant Tumenggung Mangundipura 1 *jung*, and royal servant Nagabéhi Jagasura 1 *jung*. Total 4 *jung* of which 'excess' is 1 *jung* taxed as 4 jung

The villages of Kulur and Bercak were as containing respectively 50 and 8 *cacah gawé wong* as part of Mangundipura's appointment in 1786. Yet in the 'appanage adjustment' documents only a year or so later they have been converted to *jung* at a ratio of ca 4 *cacah gawé wong* equaling 1 *jung*. Kulur also turns up in the appanage list of Jayadipura, Mangundipura's son dated 1811, which returns to the man power based measurement of units of production. A similar phenomenon is seen in the list of other high-ranking officials, among others that of Sumadiningrat. [46]

Cadastral (jung) units

The juxtaposition of manpower (*cacah gawé wong*) and land power (*jung*) found in Javanese documents constituting *The Archive* raises an unresolved research issue over the character of the traditional revenue assessment. In point of fact, the issue is double. The first part entails how it can be interpreted from the data provided by *The Archive of Yogyakarta*; the second part is establishing how much this reflects reality at the rice-roots level at that time. Present discussion aims at merely clarifying the former.

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[46] The latter's pre-existing appanage of pre-1787 measured in *cacah gawé wong* as are the units in its confirmation in November 1794 in connection with his appointment as Bupati. Between these dates is a list of the same villages measured in *jung*, this time at a ratio of 4.1 to 1.

Were it not for the subsequent action of the colonial governments the issue would remain another example of academic hair-splitting. While measurement in man power units predates references to cadastral units in *The Archive* and continues well into the 19th century, use of *jung* date from the 1788-89 decrees of Hamengkubuwana I. European observations summarized by Carey suggest that the best known one was,

> …a massive attempt to resurvey the landholdings of the court set in train by the first Sultan (Hamengkubuwana I, r. 1755-92) shortly before his death, when the old agrarian unit of the Majapahit *rood* (rod) was reintroduced into the central districts.[47]

'Survey' here must have the meaning of '…examining the condition of…' (*Concise Oxford Dictionary*, 1991), rather than a more literal definition of physical measurement of land holdings. As we shall see, the latter was a calculation from the number of *cacah gawe wong* rather than a measurement. Even so, the use of lineal unit of measurement in the quotation presupposes the existence of cadastral units, which again anticipates subsequent developments, not the situation at that time. The information simply does not tally with the contents of what became Section II, Part 3 'Appanage Adjustment' of *Archive* II.

Moving from wishful thinking of foreigners to documentation, the only concrete local information on the transition from *cacah* manpower units to cadastral ones are the two dozen documents from 1788-89. As represented by one of them (# 3) summarized in Figure 2, they consist of royal orders to high-ranking ministers to investigate taxable holdings. If they were found to exceed that specified in the respective grants, the 'excess' lands were to be confiscated. Despite protests by and on behalf of among others Mangundipura and the apparent lack of communication at the highest levels of government,[48] a modest number of units were marked for retrenchment and setting the resultant back taxes on the excess.[49] Of the twenty-three

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[47] Peter Carey, 'Waiting for the 'Just King': The Agrarian World of South-Central Java from Giyanti (1755) to the Java War (1825-30), *Modern Asian Studies*, vol. 19 (1985), p. 56.

[48] The sources include a letter from Sumadiningrat concerning criticism for mistaken confiscation (*pendhet*) of Mangundipura′s lands (BL Add MS 12342:106r-v, *Archive II*, p. 309-10); and royal orders commanding the *Patih* to investigate the mistakes in connection with confiscation of among others Mangundipura′s grants for which Sumadiningrat asks for pardon (Order #15, Bl Add MS 123241: 167r-v, # 16 Bl Add MS 14397: 11r-v, and # 17 *Ibid*, 62-r-v, *Archive II*, pp. 81ff. The last one also clarifies how the documents have been manipulated. To these come the statement of the royal scribes (*carik-Dalem*) pleading their innocence in the manipulation of the appanage of Mangundipura, which and been scratched out (*angerik*), Bl Add MS 12341:178r-179v, *Archive I*, pp. 152-3.

[49] The total taxes due from all the retrenched 'excess' lands reported by the twenty-seven extant documents was 2330 real. This represented roughly 10% increase in the Sultan's income. Crawfurd reports that his income derived from '. land held in his own hands', which must include those temporarily alienated in grants, amounting to 23,000 real a year (Mac Pr # 21: 139). *The Archive* itself puts the Sultan's income for the three years 1791-93 at 64,000, amounting to some 21,000 a year. Between 1794 and 1801 the only figures available, it varied from 26 to 36 thousand real per year (Bl Add MS 12303:158r-160v, *Archive II*, pp. 323-6, likely from 1801.

The computed value of *jung*, as opposed to actual measurement, is also seen in documents concerning Sumadindingrat. These consist of 1) conformation of his holdings in the pre-1787 period measured in *karya* (*krama*. for *gawé wong*) (BL Add. MS. 12 342:70r), 2) his appointment (#16) as Bupati in 1794 measured in *cacah*

villages in which retrenchments were cited only six can be identified from Mangundipura's appointment letter a year earlier. These confirm that the *cacah gawé wong* figure had been converted to *jung* at the ratio of 1 to 4.

Because *The Archive* does not explain the background or mechanism resulting in the ambiguity between man and land power we are confronted with a 'black box' explanation. *Gawé wong/karya* are put in and out come *jung*, apparently arrived at by a mechanical formula. Despite the quotation from Peter Carey there seems to be no evidence pointing to the existence of measured surveys of productive lands in this period.

> According to Ricklefs 'Some Statistical Evidence on Javanese Social, Economic and Demographic History in the later Seventeenth and Eighteenth Centuries' – *Modern Asian Studies*, 20, 1 (1986), pp. 1-32 – the Giyanti partition of 1755 was not based on a new census or cadastral survey as previously asserted by him (Mangkubumi, p. 158), but on older conventionalized *cacah* ('household') figures dating back probably to Sudan Amangkurat I's (r. 1646-77) census of 1651. [50]

In other words, the *jung* figures were notionalized from a presumably more accurate tally of the actual numbers of those under the *cacah gawe wong* obligation.[51]

That the *jung* measurement derived from the *cacah gawe wong* rather than the reverse is confirmed by *The Archive* itself. Several of the early 19th century documents specifically state that the amount of *jung* were 'calculated' (*ètang*, *kepètang*) from that of *cacah gawé wong*. Hereafter the two were used interchangeably by foreign observers and colonial officials of the period, followed by modern scholars relying primarily on those sources. Judging from the extant documents Javanese scribes perpetuated the ambiguity,that is with an important difference. *Jung* were connected with a taxation rate (*paos*), which seems to be the origin of the land-rent obligation extracted from those wishing access to productive lands, mainly the 'land-holding' peasants (*sikep*) as well as appanage holders and their subordinates.

Clearly there are factors involved about which we can only speculate. Foremost in this respect must be the fact that the means of augmenting state income lying closest to hand was through increasing gains derived from lands under production. Given the low population density of 18th century Java reclaiming swamps and riverine lands or clearing forests were viable options. However these were dependent upon the grants being defined as so many cadastral units. As we have seen, manipulating the contents of administrative documents was not uncommon. Yet, increasing one's holdings by physically expanding them by cultivating the so-called 'waste lands' would have been more effective and in the long run more profitable. In contrast there seems no way of increasing manpower units short of taking them from other potentates. This was effectively ruled out by the prevailing *pax Nederlandica* as illustrated by the notable lack of armed conflicts since the Gianti Treaty of 1755 dividing the former Mataram

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gawé wong (BL Add.MS. 12 342:266r-67v), and 3) sometime in between a list of his *sabin* (wet rice) holdings measured in *jung* (Appanage #32, 33, BL Add.MS. 12 341:31 8v-319r) In comparison as much as 70% of the three correspond with the villages listed under different measures of productive units.

[50] Peter Carey, *op. cit*., p.15, n 48.

[51] The few relevant documents referred to by Ricklefs, i.e. from Banten and Palembang likewise are purely numerations of persons without any reverence to land. With marginally better sources a more complete example is provided by the *cacah* lists from the Cirebon-Priangan region in the late 17th century.

realm into the principalities of Yogyakarta and Surakarta. An enforced peace between the various elites also undermined the need for maintaining numbers of armed retainers which could be called upon in times of conflict. Such standing manpower reserves, for which a specific number of *jung* assigned for their maintenance, tended to be converted to participation in the various festivals and ceremonies so assiduously recorded by *The Archive* (Sec II, Part 5, pp. 273ff). A final and perhaps determinant factor was European, here Dutch and English, pre-occupation with cadastral units of land. It has been argued that Dutch East India Company's application of labor bonds to the cultivation and processing of salable commodities for export created, or at very least increased, the value of land per se. Uniting labor obligations with selective access to the means of production, i.e. land, produced a system which, for lack of a better term, can be called a feudal mode of production.[52] Whatever the original form, the revenue base of both South India and south-central Java ultimately came to derive from taxes levied on privately-owned lands.

Consequences

As noted earlier, much of the significance of the contrast between the contents of indigenous records and European observations comes from how they were used by colonial powers. The English East India Company based its socio-political policy for South India relatively closely on the indigenous system as, among others, related in Buchannan's investigation in 1800.[53] As a servant of the East India Company, Buchannan was particularly interested in possibilities of obtaining revenue from the land. Nevertheless his salient observations do not conflict directly with the contents of the *kaditas*. More important, they were incorporated, albeit in modified form, into the Survey Settlement of 1889 led by Col. Grant, which became the keystone of British revenue policy in the region. In comparison with the situation in mid-nineteenth century Java colonial deviations in South India from the system described by local sources were either modest or gradual.

The spectacularly forced change in agrarian relations of south-central Java stands in stark contrasts. There the beginnings of a shift from man power to land power identified in the documentation considered above was intensified by the Netherlands Oost Indië government decision to exploit the emerging system for its own economic gain. Four decades of intensive exploitation followed under the regime of the Cultivation System – the *kulturstellesel* to give its official name – introduced by van den Bosch in 1830, which continued officially until the promulgation of the 1870 Agrarian Laws. The extent to which the Cultivation System was a game changer in the island's revenue structure is less important than the fact that the System was a consequence of tendentious interpretation of 'native tenure.'

Greatly simplified, the colonial construction rested on the assertion that 'ownership' of land, that is, exclusive access combined with the obligation to pay for access to it, constituted the primary element in the revenue system. The logical consequence was that control over manpower followed via the fact that access to arable land, even for necessary production of

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[52] Hoadley, *Feudal Mode of Production*, 1994, p. 184ff.

[53] See R.S.Deshpande and Malini Tantri (1991), 'Agriculture in Karnataka; A Historical View after the fall of Seriragnapatna', ISEC Working Paper 191, Bangalore.

subsistence for direct producers, was contingent on paying a tax. The notion is succinctly expressed by or perhaps even originated by Crawfurd, i.e, that:

> …proprietary right in the soil is unquestionably vested in the sovereign…The lands are then the undisputed property of the sovereign, and form the chief branch of the revenue of the state (Crawfurd, Mac Pr. #21: 231-2)

But Crawfurd's statement, seconded by Raffles and repeated in colonial documents of the period, collides with the, albeit incomplete, picture of the pre-Cultivation System revenue assessment based on study of the autonomous Javanese documents contained in *The Archive of Yogyakarta*, which pre-dated by decades the arrival of the British in 1811. The conclusion must be that the latter's description anticipates forced resolution of the then on-going innovation. The ultimate result of the latter would make conditional access to arable land the crucial element within the revenue system.

This brings us to the second part of the issue, namely do the conclusions drawn from *The Archive's* documents reflect reality. Crucial in this respect are indications that the concept of 'sovereign ownership' was overstated. A modest amount of information deriving from the period's legal contests over land holdings casts doubt on the belief's authenticity. Nearly a half dozen of the 'Appanage Adjustment' documents cite the *jaksa negara* (Chief magistrate) – in 1789 Wira Wangsa (#5, 6), pre-1787 Ranuwita (#10), and in 1787-88 Puspadipura (#19) – as part of those entrusted with retrenchment investigations. Unfortunately nothing is known of these cases except that they resulted in transfer of land from the grantee to the crown. However the apparent active involvement of the *jaksa negara* clearly indicates a juridical aspect to the transactions by definition consisting of two or more parties. Moreover two more cases (#24, 25) were specifically the results of a victory before the *pradata* court (*menang paben ing Pagelaran*). By any measure judicial contests over land, which by definition include at least two parties, undermine claims of permanent, immutable land ownership. They are thereby incompatible with the type of 'sovereign ownership' conveyed by among other John Crawfurd.[54]

Additional evidence for the existence of non-sovereign, i.e. privately owned, arable land comes from sources external to *The Archive*. A specific legal paragraph of a law (Art. 20) contained in the *Undang-Undang Luwangan Mataram* (Summary of the laws of Mataram) reads:[55]

> A civil legal decision of old. In a suit concerning the appropriation of land the tax for the plea is 1 keti 5 laksa. If the land has already been utilized for four years and the owner has not suited before

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[54] Parenthetically, Mangundipura in a (undated) protest retrenchment of his appanage claimed that this '...constitutes illegal seizure of another's property (*cahak* = to trespass on the rights of another...to seize illegally, R&W) through misuse of a royal order (i.e. legitimate retrenchment), BL Add. MS. 12 341: 167r-v (142r-v)

[55] The title is known from two West Javanese manuscripts − LOr 7440:264-315 and 7410:47v-57v. It has been argued elsewhere that it dates from the period of Mataram before 1676-77 and the loss of its colonies as result of the revolt of Trunajaya that year.

> the judge, not to speak of asserting his rights, it is authorized for that land to be taken over by the new owner…

The incompatibility of sovereign ownership with legal practice is further supported by summaries of two legal contests over land ownership. The first concerns rival claims on *tegal* (dry) fields, dated 9 *Jumadilakir*, *Alip* or 1602; the second is a suit for damages coming from destruction of *sawah* (wet rice fields) and bears the date Monday (*Mulud* in the year *Èhé, saka* 1590 or 1648. Near identical presentations found in the *Raja Niti* and the *Undang-Undang Senapati Jimbun* (Laws of Senapati Jimbun [founder of Islamic Demak]. Moreover, as in the just-cited Art. 20 of the *Undang-Undang Luwangan Mataram*, the use of recognizable traditional legal concepts to decide the affair further argues for the authenticity of the cases, even as an ideal or didactic ones.[56] Its importance lies is confirming that litigation over land, wet-rice or dry, by private individuals (neither of them associated with sovereign authority), is similarly incompatible with the type of sovereign authority over land suggested by Crawfurd in 1813 and later acted upon by both British and Dutch administrators.

Thus an all-encompassing sovereign ownership implied by foreigners was alien to the Javanese tradition prior to that time. Despite this, they not only reflected a generally held belief among British administrators[57] but also were congenital to the Dutch upon their regaining control over the island in 1815. A final argument against such is provided by the course of events. That is the regents' disposal right over land bequeathed by the sovereign or acknowledged, was recognized in practice during the decade preceding the Java War of 1825-30. Much of the arable land in Central Java was leased out by regional potentates to Dutch or Chinese enterprises for cultivating tropical products. As a variation of 'sovereign ownership', the policy was most profitable for both entrepreneurs and Javanese *priyayi*. The unilateral reneging of these lucrative contracts ordered by the Netherland Oost Indies government, apparently drawing upon the principle of 'sovereign ownership,' brought enormous losses to entrepreneurial Javanese *priyayi*, as well as frustration over being deprived of expected gains. It seems to have been a significant element in deciding many *priyayi* to support the revolt against the Dutch. Regardless of how much this contributing to the uprising's spread, the existence of such a system in the heartland of Central Java, after 1815 under the direct control of the Dutch government, again points to de facto existence of disposal rights in land.

As indicated above, it is the Cultivation System that stands as the most spectacular result of colonial administrators' (conscious) misreading of the nature of the traditional revenue system. In order to avoid going too far afield, a summary of the motivation and results of that system is relegated to Appendix I. Establishing that it had its roots in foreign interpretation of an on-going shift in the basis of the local revenue assessment system, which presented them with a golden opportunity in that itself was very likely steered by influences of mercantile capitalism – is sufficient for the arguments advanced here.

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[56] Mason C. Hoadley,′18th Century Javanese Case Law′ (in preparation).

[57] See John Bastin, 'Raffles' Ideas on the Land Rent System in Java and the Mackenzie Land Tenure Commission', *Verhandelingen van het Koninklijk Instituut voor Taal-, Land- en Volkenkunde*, Deel XIV, 19XX.

Conclusion

One lesson gained from the present work's use of contemporary archival material produced by indigenous administration is the importance of reflecting on the veracity of European observations. The question is more than an academic one. European observations represented by Buchannan and Grant in Karnataka and Crawfurd and Raffles in Java, became the base of colonial policy. Near to hand are the examples British raja's Survey Settlement of 1889 in South India and Raffles' swings between the Zamindari and Royotwari systems, both borrowed from India. These were perpetuated and embroidered upon by the returning Dutch in the form of the Cultivation System. It should be remembered that the European observers were not scholars in search of 'truth' or whatever motivates academics, but representatives of commercial enterprises aimed at making economic gains from their investments in Asia. Consequently an understanding of the local economic system, here more specifically the revenue system, by officials of these ventures was only a means. Eventual profit was the end. Despite this, the analyses were surprisingly insightful. The few studies drawing upon local archives have added the specifics, filled in gaps, and generally given the observations a more nuanced, local-centric tone. They also call for a thorough revision of accepted scholarship.

The case of Java during the British occupation seems particularly pressing. This is because generally there is a remarkable tendency toward circular reasoning in the scholarly literature. Explanations start backwards with the assertion that the Cultivation System was based on a minor modification of the direct producers' land rent obligation. The 'tax', payable in cash or kind, was transformed into a duty to earmark a certain percentage of their land to cultivating saleable tropical crops – sugar, indigo, cotton, etc. – which were to be surrendered to the Dutch as the 'new' sovereign, who thus profited from resale via their world-wide trade network. The alternative for the direct producers, i.e. those without access to land, was to provide a certain amount of work day for the Dutch agro-industry in lieu of a tax. This seems to ignore the information derived from *The Archive* showing that land ownership, and subsequently a land rent based upon it, were the results of later developments. The accepted scholarly image seems to have confused effect with cause. Land rent converted to obligations of directed agricultural production or quantity of work days for the overlord was a result of colonial influences – of both colony and crown – not the pre-condition.

A second lesson is that comparison between South India and Central Java raises the possibility that developments in the former might be an exception rather than the rule. If so this would also question the validity of many of the theories of Asian development drawing upon the Indian experience. Most of the countries of Southeast Asia have undergone fundamental changes in the development of the basis of elite authority and whether it is dependent upon control of man or land. It would seem that the majority of these kingdoms – Ayudhya (Thailand/Siam), Mandalay Burma/Myanmar, Central Java, and to an extent Lê Vietnam – were based on control of manpower. Only in the course of time and colonial prodding were they transformed into a land power basis. Land was plentiful, manpower was the scarce resource. If one could go back to a time when South India had similar conditions, i.e. an abundance of arable land and scarcity of manpower, it is not entirely impossible that a precursor to the *bijawari* system portrayed in the *kaditas* was a development of a system not too different from that

witnessed in Central Java up to the late 18th century. This, of course, remains purely speculative. Yet it would be interesting to test the hypothesis against the contents of the earlier *kaditas*, that is, to the extent such an undertaking is realizable. Figure below sketches the possibility.

Basis of revenue assessment

	South India	Central Java
Up to eighteenth century	manpower?	control over manpower
By late 18 century	*bijawari* system	manpower supplemented by land power measurement, i.e. *jung*
By end of 19th century	*bijawari* modified by Survey Settlement 1889	'ownership' of land becomes key to revenue system under Cultivation System.
National states	land tax	land tax

Appendix I. The Cultivation System

Due to a series of exceptional historical circumstances the colonial government of Java had both motivation and means of running roughshod over indigenous institutions. Motivation came from two costly military efforts. The first was the unsuccessful attempt to hold fast the southern provinces of what would become Belgium resulting from dissatisfaction with its place within the 'greater Netherlands' created by Treaty of Vienna in 1815. The second, the Java War of 1825-30, ended better for the Dutch. Although it was ultimately quelled and its charismatic leader, Pangeran Dipanagara, captured and sent into exile, the cost of quelling the five year long insurgency was enormous. Thus by 1830 the treasury of the Kingdom of the Netherlands, which after 1848 included the Javanese colony, was empty. A radical alteration in policy was necessary to recoup outlays for the two wars.

Opportunity came with the defeat of the Javanese forces. The aftermath of the uprising had eliminated the *priyayi* as an independent group which could ferment resistance, even by lawful means, to whatever policy the Dutch decided upon to re-fill the treasury. The result was a departure from the more usual colonial policy of accommodation with local institutes. This took the form of the infamous Cultivation System. Rationale for what must be seen as one of the most effective exploitation of the Third World's inhabitants stemmed from the dubious claim so glibly expressed by most Europeans that the sovereign was the sole and undisputed owner of all lands. In exchange for allowing the direct producers access to 'its' lands, the Netherlands Indies government demanded taxes. Lacking resources in kind or cash, the cultivators were ordered to grow commercial crops on $1/5^{th}$ or more of their fields, the produce subsequently being surrendered to the Dutch as tax in kind. Within a short time the amount of land demanded for the commercial crops expanded greatly to the detriment of producing consumables for the local population. This was made even more onerous by Dutch demands for gathering the produce, transporting it to factories to process it, etc. The result was unheard of wealth remitted to Den Haag and unheard of poverty for the direct producers.[58]

Without going into the details it can be noted that the system brought about what amounted to a revolution in governmental structure. As dealing with individual producers was time-consuming and inefficient, they were summarily grouped together under the supervision of the village chief, who became thus the kingpin linking the central Dutch government at Batavia with the direct producers on the land. In principle the village as the building blocks of the system was a product of the Cultivation System, as was the unquestioned authority of the village chief. This was 'unquestioned' because all local laws and agreements between the Dutch and 'natives' had been abolished around mid-century. On orders of Batavia, the village chief dictated what crops would be cultivated, how much of it would be farmed, and what price the direct producers would receive, all on the orders of Batavia. In the words of one researcher, the system was one of '…the rule of (Dutch) men rather than of law'.[59]

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[58] *Onderzoek naar de Mindere Welvaart der Inlandse Bevolking op Java en Madoera*, 3 deel, (Report of the Investigation into the declining welfare of the native population on Java and Madura), Batavia, 1911.

[59] Van Niel. Robert, *Java under the cultivation system: collected writings*, Chapter V: 'Governmental Policy and the Civil Administration in Java during the early years of the Cultivation System', (Leiden: KITLV Press), vol.150, 1992, pp. 87-88.