Irrigation and Agrarian Change in India: Two Village Studies of Differentiation Without De-peasantization
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Irrigation and Agrarian Change in India: Two Village Studies of Differentiation Without De-peasantization

Anil Kumar Vaddiraju

Abstract
This article is based on two village studies and a primary survey conducted in the irrigated part of South Telengana, Andhra Pradesh, India. It shows that, in the period 1960–96, canal irrigation and the rapid commercialisation of agriculture reinforced the dominant castes/classes, but also that the small and middle peasantry survived. State intervention strengthened the dominant landowners, particularly through irrigation, which increased the value of land, as well as through subsidies for tractors and mechanisation. These interventions increased caste/class inequalities, but did not lead to the disappearance of the peasantry. The article points to the consequences of irrigation for agrarian change and concludes that irrigation without meaningful land reform can only strengthen the pre-existing inequalities, in terms of both caste and class.

Keywords
agrarian change, irrigation, commercialisation of agriculture, peasantry, caste/class differentiation

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Introduction

This article addresses the impact of irrigation on agrarian change and local politics in the irrigated region of South Telengana, Andhra Pradesh, over the period 1960–96. The article is based on a primary survey and two village case studies from Miryalguda Mandal of Nalgonda District, South Telengana. The studies show the contradictory nature of agrarian change in a region where the peasantry has persisted over time, despite facing several problems in terms of survival and economic inequalities. An attempt is made in this study to integrate both qualitative and quantitative methods. Such a methodological integration in studies of rural India has been signalled by Pranab Bardhan (1989) and a more general case has been made by Martin Bulmer and Donald P. Warwick (1993). This article not only follows the lead of the above authors, but also follows the method of critical social research elaborated by Lee Harvey (1990). However, greater emphasis throughout has been placed on the qualitative aspect of agrarian change.

In what follows, an overview of agrarian change in the period 1960–96 will first be presented. Then, the results of the sample statistical survey conducted will be discussed, before presenting the village case studies, wherein the processes of agrarian change will be discussed in detail. These processes include the commercialisation of agriculture, changing social relations of production, tenancy arrangements, migrant labour and local politics. By way of conclusion, the article will indicate some policy implications, namely that in the absence of agrarian reform, irrigation per se cannot lead to progressive change and that for equitable agrarian change to occur in terms of structural relations of production, it is essential to have both irrigation and agrarian reform.

Agrarian Change: Polarization and Persistence

Irrigation came to Miryalguda region in 1967, with the construction of Nagarjuna Sagar Project (NSP) across Krishna River. With the onset of irrigation, the entire region shifted its cropping patterns from millets, pulses and castor to rice monoculture. Paddy, once grown only under tanks and, to a lesser extent, wells, came to be cultivated across the entire village lands by all the classes of cultivators. We say ‘all classes’
of cultivators, because it is axiomatic that Indian villages are stratified in terms of class and caste. We discuss this below in depth. This is also true of the Miryalguda region.

Although the shift to rice monoculture began right from 1967, a major shift to commercial production of paddy appears to have started only in the early 1970s, when the Borlaug package of High Yielding Varieties (HYVs) of seed was introduced. It was the beginning of the ‘green revolution’ in this region, also necessitating the purchasing of fertilisers and pesticides. The consequent high yields were often sold in the market. However, changes in the other productive forces occurred in the early 1980s, when tractors entered the scene in a major way. The purchasing of tractors by almost all the big landowners, mostly through subsidised bank loans, transformed the technical nature of agricultural production and processing drastically. Tractors replaced the bullock and the plough, not only of landlords, but also of small and middle peasants, as tractor hiring became increasingly a common practice. Tractors came to be used not only at the time of ploughing (on piece rate contract), but also for threshing and winnowing purposes. This process of tractorization benefited the tractor-owning landlords to a large extent, which comprised of the dominant castes. This situation of mechanisation is similar to what Hart et al. (1989) discussed in the context of South East Asia, though in that case, the caste system does not exist.

The caste system is pervasive in the villages discussed here. The dominant castes are largely Reddy and to some extent Velama and Brahmin the case of the Yadpalle, the dominant castes were Reddy. The dominant Reddy caste landlords purchased tractors and modernized their farming practices, so as to keep them in tune with the intensification of cultivation associated with commercial paddy production. The tractorization, in turn, helped them make their own agriculture productive and efficient and also earn cash incomes through hiring out their tractors; however, not all landlords succeeded in this respect. In the villages coming under the irrigated region, the landlords belonged to Brahmin, Reddy and Velama castes. The Brahmin and Velama caste landlords, who could not do the above, declined in stature and their holdings also dwindled and thereby their socio-political influence.

Did the agrarian change lead to the polarization of agrarian classes? Did the small and middle peasantry disappear? How did the power of the landlords affect the dynamics of local politics during the period
1960–96? Was there a qualitative change in agrarian relations? The fact that the assured canal irrigation had made the economic position of the landlords stronger is subject to a caveat. Only those dominant caste landlords, who were able to adapt themselves to the changing agro-economic and agronomic conditions, managed to keep their position intact. Those who did not, declined. The successful landlords had to be efficient on both fronts: in terms of managing on-farm production relations, as well as exchange relations with the urban market. Certainly, Reddy caste landlords, with strong caste solidarity within and across villages, succeeded most in the process. Supra-village contacts helped them socially, economically and politically.

Production relations, too, have changed over time. Casual labour is predominant and most preferred by landlords. There is Jeetham labour, that is, annual farm servant labour, but it cannot be considered a labour-tying practice: no Jeetha stays put to a landlord for more than a year. Production relations, more generally, are capitalistic on the economic plane, that is, at the workplace, on farms and while hiring labour, but at the level of the general social relations, there are strong elements of traditional social and political power, in terms of rigid caste hierarchy and everyday social relations. The landlords in the irrigated region are accumulating capital and re-investing it in tractors and related inputs; moreover, they are investing the capital earned from agriculture in urban businesses, such as private finance companies, real estate businesses and trading activity. The landlord class also does not face certain social problems, such as heavy dowries given during marriage, which have risen with land prices in the above process. The only aspect which affects the landlords negatively and has led to the de-concentration of landholdings is family partitioning. It is because of family partitioning that we cannot find land concentration at a scale that existed around 1960.

The two village studies of Yadpalle and Gudur below demonstrate a dual process of polarization between classes ‘and’ persistence of the middle and small peasantry. The polarization that has occurred has owed not to the expansion of land controlled by the landlords, but to the increase in the capital intensity of their farms. This has been mediated by the caste–class relationship in the villages. In Telangana, much like in the rest of the country, the middle and small peasantry usually comes from backward castes, while the agricultural labour often belongs to scheduled
castes and landlords to upper castes. (This is most usually the case, but local specification in the social structure can vary). According to the standard narrative on polarization and depeasantization, the peasantry should have disappeared (Bryceson and Mooij 2000). But this did not happen in our case. In fact, the small and middle peasantry has also benefited from two processes, namely irrigation and the deconcentration of big land holdings—whereby landlords of some castes, for example, Brahmin and Velama landlords in Gudur, sold their land to backward castes.

In the following section, the village studies will illustrate the qualitative changes, while the quantitative survey conducted in the ‘same’ villages also corroborates the main arguments. Below, we first discuss the results of the primary statistical survey, before turning to qualitative studies.

A Picture from a Primary Statistical Survey

To have a quantitative idea of the scenario of agrarian change, a primary survey was conducted in the same villages where more qualitative, anthropological studies had been conducted earlier. A proportionate stratified random sample of fifty households in each of the two villages, Yadpalle and Gudur, was selected. The sample comprised of five agrarian classes identified as the major ones: marginal peasants, small peasants, middle peasants, rich peasants and landlords. The criterion followed for defining classes was the ownership of landholdings; despite the fact that definition of agrarian classes by acreage is controversial, we believe that the extent of ownership of land is, to a large measure, a valid indicator of the class position of the households, particularly in the irrigated areas. The World Agricultural Census (WAC), based on whose data the sample was prepared, also provides data in acreage terms and the sample used herein is based on the 1995–96 data of WAC for the region under study. The primary survey provides data on the above aspects for each decade of the period 1960–90, whereas the qualitative accounts provide information on agrarian change up to 1996. Despite these variations, both quantitative and qualitative accounts, as provided here, are supportive of each other.

While discussing the caste status of classes, we have classified the different castes and sub-castes into three categories: the scheduled castes,
the backward castes and ‘other’ or upper castes. In the following section, we present a discussion of the survey results under four sub-headings, namely: (a) land ownership patterns among different peasant classes; (b) percentage distribution of landholdings among different peasant classes; (c) the average size of landholdings among different peasant classes; and most importantly, (d) the caste composition of different classes.

Land Ownership Pattern among Different Peasant Classes

In respect of the two villages in question, the statistical data that we have gathered through a primary survey shows different and mixed trends. The land ownership pattern presented in Table 1 for five different classes shows that marginal peasants in the irrigated region (39 sample households) owned and controlled 24.9 acres in 1960, whereas in 1990, they controlled about 25.70 acres, an increase of only about 0.8 acres. Small peasants (40 sample households) held about 77.7 acres in 1960, while in 1990 they held and controlled about 67.32 acres, a drop of 10.37 acres. The small peasants, in fact, lost some of their lands. Middle peasants (11 sample households) in the irrigated region owned and controlled about 30.78 acres in 1960, whereas in 1990, they held about 39.94 acres, a gain of about 9.16 acres. Rich peasants in the irrigated region (6 sample households) owned and controlled 113.52 acres in 1960, whereas in 1990 they controlled only 58.50 acres a drop of about 55.02 acres of land.

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Marginal</td>
<td>24.9</td>
<td>18.7</td>
<td>29.82</td>
<td>25.70</td>
<td>39</td>
</tr>
<tr>
<td>Small</td>
<td>77.7</td>
<td>65.91</td>
<td>54.48</td>
<td>67.32</td>
<td>40</td>
</tr>
<tr>
<td>Middle</td>
<td>30.78</td>
<td>52.77</td>
<td>32.14</td>
<td>39.94</td>
<td>11</td>
</tr>
<tr>
<td>Rich</td>
<td>113.52</td>
<td>80.47</td>
<td>56.5</td>
<td>58.50</td>
<td>6</td>
</tr>
<tr>
<td>Landlord</td>
<td>84</td>
<td>74</td>
<td>84</td>
<td>94.00</td>
<td>4</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>330.9</strong></td>
<td><strong>291.85</strong></td>
<td><strong>256.94</strong></td>
<td><strong>285.46</strong></td>
<td><strong>100</strong></td>
</tr>
</tbody>
</table>

Source: Primary Survey.
ownership. Landlords in the irrigated region (4 sample households) controlled 84 acres in 1960, whereas in 1990, they controlled about 94 acres, a gain of about 10 acres. Landlords are observed to have obviously gained over the period 1960–90.4

**Percentage Distribution of Land among Different Peasant Classes**

The percentage distribution of landholdings across different peasant classes within the sample (as presented in Table 2) shows that the marginal peasants increased their share of landholdings from 7.52 per cent in 1960, to 9.00 per cent in 1990. However, one can observe that there was no steady increase and that there were ups and downs over time. In 1980, for example, although the marginal holdings accounted for about 11.60 per cent, there was a decline between 1980 and 1990, from about 11.60 per cent to 9.00 per cent. However, substantial change has been observed in the percentage of land owned by small peasants in the irrigated region. Small peasants owned about 23.50 per cent in 1960, whereas in 1990, they held about 23.60 per cent, an increase of about 0.10 per cent. The middle peasants in the irrigated region are found to have fared better than small and marginal peasants in terms of land ownership. In 1960, the middle peasants owned land of about 9.30 per cent, which increased to 14 per cent in 1990.

**Table 2:** Percentage of Distribution of Landholdings across Peasant Classes, 1960–90

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Marginal</td>
<td>7.52</td>
<td>6.40</td>
<td>11.60</td>
<td>9.00</td>
</tr>
<tr>
<td>Small</td>
<td>23.50</td>
<td>22.60</td>
<td>22.20</td>
<td>23.60</td>
</tr>
<tr>
<td>Middle</td>
<td>9.30</td>
<td>18.08</td>
<td>12.53</td>
<td>14.00</td>
</tr>
<tr>
<td>Rich</td>
<td>34.30</td>
<td>27.57</td>
<td>21.98</td>
<td>20.50</td>
</tr>
<tr>
<td>Landlord</td>
<td>25.38</td>
<td>25.35</td>
<td>32.69</td>
<td>32.90</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>100</td>
<td>100</td>
<td>100</td>
<td>100</td>
</tr>
</tbody>
</table>

*Source:* Primary survey.
The rich peasants in the irrigated region show a different trend as compared to the middle peasants, in that they accounted for about 34.30 per cent of land in 1960, while this decreased to 20.50 per cent in 1990. The landlords, however, are observed to have increased their land ownership share between 1960 and 1990, from about 25.38 per cent to about 32.90 per cent. This means there was an increase in the land ownership share by landlords, in the irrigated region. The situation becomes clearer when we take a look at the average size of holdings among the peasant classes.

**The Average size of Holdings across Peasant Classes**

The average size of landholdings across five peasant classes (provided in Table 3) shows that the average size of the holding among the marginal peasants of this irrigated region has increased from 0.63 acres in 1960 to 0.65 acres in 1990; an insignificant increase, indeed. The middle peasant landholdings show a different trend in the irrigated region. The average size of landholdings among the middle peasants was 2.79 acres in 1960, while the same increased to 3.63 acres in 1990, surely an indicator of increase in land ownership among the middle peasants. Rich peasant holdings in the irrigated region, based on the data we have, show a decrease from 18.92 acres in 1960, to 9.75 acres in 1990, a drastic decline, indeed. Interestingly, the average size of the holding does not show a decrease among the landlords of the irrigated region. In fact, it

<table>
<thead>
<tr>
<th>Peasant Classes</th>
<th>Average size of land holdings in acres</th>
</tr>
</thead>
<tbody>
<tr>
<td>Marginal</td>
<td>0.63</td>
</tr>
<tr>
<td>Small</td>
<td>1.94</td>
</tr>
<tr>
<td>Middle</td>
<td>2.79</td>
</tr>
<tr>
<td>Rich</td>
<td>18.92</td>
</tr>
<tr>
<td>Landlord</td>
<td>21.00</td>
</tr>
</tbody>
</table>

**Source:** Primary survey.

shows an increase from 21 acres in 1960, to 23.50 in 1990. The average size of the holdings among the small peasants, however, is found to have declined from about 1.94 acres in 1960, to 1.68 acres in 1990.

### Class/caste Composition of Different Peasant Classes

Our survey results also provide information on caste/class relationship (see Table 3). In this region, among the marginal peasants interviewed, amounting to a sample of 39 households, nine of them belong to scheduled castes and the bulk, or 30 households, to backward castes. Of the small peasant class, among a sample of 40 households, five come under scheduled castes, while again the bulk, or 34 households, belong to backward castes; and only one small peasant household belongs to the ‘other’ or upper castes. Among the middle peasant class households in the irrigated region, out of a sample of 11 households, none belongs to the scheduled castes, while nine belong to backward castes and two to upper castes. Among the rich peasant class households in the irrigated region, in a sample of six households, none belongs to the scheduled castes and three, exactly 50 per cent, belong to backward castes, while another three, the remaining 50 per cent, to the upper castes. Among the landlord class households, all of the four households in the sample belong to the

### Table 4: Class/caste Composition of the Sample Households

<table>
<thead>
<tr>
<th>Peasant Class</th>
<th>Scheduled Caste</th>
<th>Backward Caste (classes)</th>
<th>Other Caste (Forward Caste)</th>
<th>Total Households</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Households %</td>
<td>Households %</td>
<td>Households %</td>
<td></td>
</tr>
<tr>
<td>Marginal</td>
<td>9 23</td>
<td>30 77</td>
<td>0 0</td>
<td>39</td>
</tr>
<tr>
<td>Small</td>
<td>5 12.5</td>
<td>34 85</td>
<td>1 2.5</td>
<td>40</td>
</tr>
<tr>
<td>Middle</td>
<td>0 0</td>
<td>9 81.81</td>
<td>2 18.19</td>
<td>11</td>
</tr>
<tr>
<td>Rich</td>
<td>0 0</td>
<td>3 50</td>
<td>3 50</td>
<td>6</td>
</tr>
<tr>
<td>Landlord</td>
<td>0 0</td>
<td>0 0</td>
<td>4 100</td>
<td>4</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>14</strong></td>
<td><strong>76</strong></td>
<td><strong>10</strong></td>
<td><strong>100</strong></td>
</tr>
</tbody>
</table>

*Source:* Primary survey.
upper castes. The landlord class households in this region constitute 100 per cent upper castes, demonstrating a full association between caste and class at the upper end of the class spectrum, that is, the landlords. However, at the lower end of the class spectrum, one finds a mix of scheduled and backward castes, while it is also true that the presence of upper castes among the marginal peasants is zero.

The trends emerging from primary survey data are mixed, but our main argument regarding the strengthening of the landlord class and the persistence of the small and middle peasantry will become clearer in the two case studies of Yadpalle and Gudur that follow.

**Case Study I: Yadpalle**

**Historical Background**

Yadpalle belonged to the *Diwani* or *Khalsa* system of land tenure during Nizam rule. The *Diwani* or *Khalsa* system resembled the *Raiyatwari* system of the British Raj. However, not much is known about the nature of the agrarian structure of the village during the Nizam period. Oral historical accounts of the peasants from the village inform us of two things: that there was a considerable concentration of land in the hands of a few families, who were mainly Reddys; and that these Reddys and the other castes of the village, owed allegiance to a distant *dora* of a village named Babusahebpet. Oral accounts inform us that the Reddy *deshmukh* of Babusahebpet had lands ranging from 50 to 300 acres, in nearly sixty villages. This *deshmukh* also exacted *vetti* from the service castes and scheduled castes on occasions, such as marriages and deaths or funerals among the landlord families. Babusahebpet *deshmukh* also had lands in Yadpalle of about sixty five acres. But, he as a *dora*, was not personally present and this made some difference. In the absence of the *dora*, it was the local landowning families that controlled village affairs. The *patwari*, *malipatel* and *policepatel* posts were in the hands of the local Reddy families, which in the Nizam period concentrated land in their hands. It appears that, from 1900 to as late as 1950, two Reddy families had holdings of about 400 and 250 acres each. Besides these two, there were eleven Reddy families in the village with holdings of more than 100 acres.
There are two points to be considered here. First, there was a tendency over time toward the division of large landholdings in the course of family partitions. Second, there was a tendency also towards the expansion of the landholding size. This resulted, inter alia, from the particular practices of these landowning families, such as lending in kind (that is, grain). This system was known as *naagu*, through which food grains would be lent out on the basis of compound interest on grains. Often grain-surplus landlords lent grains to marginal and small peasants on *naagu* basis and as oral historical accounts inform us, many small and marginal peasants, unable to pay back the interest in grain, ended up losing their lands to the Reddy landlords.

All in all, by 1960, two families had landholdings in excess of 200 acres and eleven families had landholdings around 100 acres, all these being Reddy caste families. Besides the above, there were landholdings by many backward caste families, ranging from three to twenty acres. By 1960, of the total village land under cultivation, amounting to 2,250 acres, approximately 1,500 acres were in the hands of thirteen Reddy families. The remaining 750 acres of land were divided among backward caste families of middle, small and marginal peasants. Although family partitioning had led to a dilution of land concentration, the above was the situation obtaining in 1960.

The crops that were grown prior to the near total shift to rice farming, with the advent of canal irrigation, were millets, pulses, groundnuts and castor. It is the construction of Nagarjuna Sagar Dam on Krishna River that changed the entire scenario.

**Canal Water and Commercialization**

Canal water came to Yadpalle in 1967. The entire mandal Miryalguda and 24 villages in it came under Nagarjuna Sagar Dam canal irrigation and the entire region shifted to rice monoculture. All the erstwhile unirrigated land came under irrigation for at least one crop. A second crop was cultivated most often, but was dependent on the extent of rains in any particular year and the volume of water released from NSP dam. There was no shift to triple cropping of rice in this area. The advent of water and assured irrigation led to dramatic change in three aspects: commercialization, tractorization and increased demand for labour.
The commercialization of production took place with respect to only one crop, that is, rice/paddy. Paddy was earlier grown in this region partly for subsistence and partly for the market. Assured irrigation now turned paddy cultivation into a major marketable crop for all classes of landowners. The introduction of the Borlaug package and HYVs in the middle of 1970s further boosted this activity, with the market increasingly penetrating the production process in the form of seeds, fertilizers and pesticides, through the same urban market to which produce was being sold. However, the most interesting change occurred in the land market, where irrigation gave a major impetus to land prices. Before 1967, the price per acre of land in this village was in the range of ₹60–100 depending on the location, soil fertility, etc., whereas in the early 1970s, the prices jumped to between ₹3,000 and ₹4,000 per acre. However, by 1980, the land price per acre was, on average, ₹100,000 and by 1996, it had shot up to ₹150,000—quite a high price in relation to the prevailing local and regional standards at the time.

It was not only the price of land but also the availability of land which became crucial in some respect. As land became a valuable commodity, no one wanted to part with it and as the land for sale was scarce, the prices shot up. The dominant landowners, while being well aware of this aspect, had taken sufficient care to safeguard their economic viability; with the increasing intensification of production, most of them shifted from bullock ploughs to tractors. In turn, tractorization further strengthened their economic position.

There were two tractors in the village in 1970; these were owned and used on the lands by two big landlords with more than 200 acres of land. In the 1970s, tractors took no part in the harvesting of paddy; however, the situation changed by 1980. Eleven other landlord families with large landholdings also acquired tractors. The purchasing of these was financed in the form of loans mostly by the ADB (Agricultural Development Bank) branch of the SBI (State Bank of India) on easy, semi-annual instalments. By the 1980s, the nature of agricultural activity too changed. Harvesting of paddy became increasingly dependent on tractors, especially with the mechanization of threshing, winnowing and transporting activities and with the conversion of the entire village to the use of tractors. Tractors came to be used even by the middle, small and marginal peasants. These above activities were added to the ploughing activity of
tractors; while the tractors belonging to landlords were not only used on their own farms but were also hired out on a regular basis. Thus, tractors not only helped make their agriculture more efficient and productive, but also brought in cash incomes. By 1990, the number of tractors was close to thirty. Some backward caste rich peasants also bought tractors through bank loans. In 1996, tractors owned by backward caste rich and middle peasants numbered about seven.

**From Sharecropping to Tenancy**

There were other important aspects to the village economy. From the 1970s, there was tenancy in Yadpalle, although it was in the form of sharecropping, until the early 1980s. Under this system, tenants cultivated about 150 acres of land in the village. The landowners renting out lands on a sharecropping basis were mainly Reddys. But gradually and particularly by the middle of 1980s, the system changed, with landowners starting to prefer fixed-rents in terms of grain. The shift worked in favour of the landlords, because under the fixed-rent arrangement, landlords faced no risk of investing in fertilizers and pesticides. Moreover, the landowners did not have to bother with the general crop situation, yields and crop outcome, which are generally subject to other contingent factors; they could collect the fixed quantity of grain irrespective of any contingencies. The grain rent per acre/per crop season was about six to seven bags of paddy from 1985 to 1988. However, by 1996, the rent had gone up to 12–13 bags of paddy per acre/per crop. When calculated in cash terms, the rent paid by a tenant in the form of 12 bags of grain worked out to ₹3,600 per acre/per season, in current grain prices. The landlords being aware of this increasingly pressed also for fixed-rent in cash, instead of grain.

It was mostly the big landlords who rented out lands and in this village it was mostly the toddy tapping caste peasantry (tapping liquor from toddy trees), which rented in land. The toddy tapping peasants have a regular supplementary income from sale of toddy (the local liquor), which provides them with some sort of a financial cushion. The rented holdings generally came to about two to five acres and occasionally even 10 acres. The trend towards fixed-rent in cash on paddy crop had only just begun at the time of fieldwork—the predominant form of payment...
still being in grain only—but fixed-rent payment appeared to be the future form.

Tenancy flows included some big landowners who rented in lands from other big landowners. This happened mainly because it relieved those renting out land from the task of personal cultivation, thus enabling them to spare time for urban business, politics and employment. It is often assumed that big landlords also rent in land from small cultivators and expand the land under their cultivation, gradually replacing the small peasant owners. This does not seem to be happening in the case studied here. What is interesting is that there was no renting in of land by big landlords from small peasant owners. This process of reverse flow was also unlikely to emerge, as there was an enormous competition for land among the small and middle backward caste peasants, which, indeed, resulted in regular upward revision of rents. In fact, tenancy is so prevalent that sometimes even the small peasants rented, in and out, from/to other small peasants. Thus, the tenancy flows were three fold, as presented in Figure 1.

This situation is similar to what Hart et al. (1989) indicated in the context of Southeast Asia, in an illuminating discussion of the renting in process.

The above shifts in tenancy meant increased security for the landowner and increased insecurity and vulnerability for the tenant. No tenancy agreement was written or registered, nor was there legal security of any sort. All the arrangements were on the basis of oral agreements. Thus eviction of tenants was not much of a problem. However, given the agrarian situation, neither the tenant nor the landowner wanted to do away with the agreement. The situation was such that the tenant would hold on to the plot in the face of cumulative disadvantages and

![Figure 1: Tenancy flows in Yadpalle](image)

**Source:** Data collected and compiled by the Author.

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*Anil Kumar Vaddiraju*
insecurities, while the landowner maintained the relation because he was able to avoid those disadvantages and insecurities. This was in spite of the fact that the region was irrigated with water supply being assured. Overall, in 1996, about 350 acres of land were under tenancy agreements in the village.

**Migrant Labour**

Canal irrigation enhanced the demand for labour tremendously. The conditions of local labour were such that, by 1996, the daily wage rate for male casual workers amounted to ₹40, while the wage rate for female casual workers was around ₹25. The annual contract wage rate for Jeethas increased from about ₹4,000 in 1980, to ₹7,000 in 1995. The Jeethas were also offered loans ranging from ₹2,000 to 5,000 (depending on demand), free of interest, even though some landlords did charge an annual interest of 2 per cent. It may be noted here that there was no obligation on the Jeetha to remain with the same landlord from one year to the next. Under this arrangement, there was undoubtedly a ‘debt relation’, but ‘no debt bondage’. Before the advent of canal irrigation, local labour supply sufficed for local demand.

However, with the double cropping of rice and the intensification of agricultural practices, there was a mismatch between local labour supply and demand. As a result, migrant labour started pouring in. Every year during transplanting and harvesting seasons, around 500 labourers would come to Yadpalle. If only one crop was cultivated, that is, in rainy season alone, they would come twice. But if two crops were cultivated in two seasons of an agricultural year, migrant labour would come four times. Labour migration began in 1970, together with the major shift towards irrigated farming. In 1996, during one of the field visits, one landlord proudly told this author that he had been employing migrant labour for the past 24 years and that he was getting migrant labour through the same mestri, or middleman.

Migrant labour came to the Miryalguda canal irrigated region from the adjacent drought prone Mandals of the Nalgonda district. Chronic droughts and the consequent lack of employment often drove the labour of nearby Mandals such as Devarakonda, Chandur, Nakrekal and Motkur into the villages of the entire Miryalguda mandal. Generally, a mestri
from the drought prone villages would first visit villages in the canal irrigated region and establish contract with the landowners of the irrigated villages. The mestri would then return and bring in the labour. Migrant labourers generally would come along with their families. They were given the cattle sheds of the landlords for accommodation.

Payment for migrant labour was done on a piece-rate basis, according to the contract conditions agreed upon between the mestri and the landowner. The daily earnings of a male labourer in 1996 varied between 10 and 20 kilograms. His earning varied because he would work in the day as well as during the night harvesting of crops. Generally, what a male labourer earned daily in cash terms amounted to between ₹40 and ₹70, while female labourers earned about half of that. However, almost always the migrant labourers were paid in grain, rather than cash. Usually, the migrant labourers stayed for 40 days to two months, per season. Unlike what one would have predicted, there was not much of mestri exploitation. Often the mestri was one among them and worked with them. This is unlike what Jan Breman (1985, 1993) discusses in the context of south Gujarat, where he finds exploitation of migrant labourers secularly by landowners, as well as by middlemen.

Until the middle of 1980s, migrant labour used to come only from the relatively less developed areas of the Nalgonda district, but since then labour has increasingly come from some districts of Andhra region, such as Prakasham and Guntur, bordering the irrigated region. Most migrant labourers were either Dalits or Dalit-Christians. Thus, the intensification of production, double cropping and the extension of cultivation to grazing lands created large demand for labour, in spite of the presence of labour-saving tractors.

**Agrarian Change and Local Politics**

The dominant Reddy families in Yadpalle benefited from the process of change unleashed by canal irrigation. During the period 1960–96, they moved from monsoon dependent subsistence agriculture to one of intensive, market-oriented commercial agriculture. The patels, as these families are traditionally known, also showed a remarkable adaptability to the
The intensification of the production process and commercialization. The only process, which affected them negatively, was family partitioning. From 13 dominant families, they increased to 32 families. By 1996, only two of these families came to control landholdings close to 100 acres, with 30 of them holding land between 20 to 45 acres.

The dominant patel families tractorized their farms, commercialized their production process and also started spreading their interests into urban businesses. Although their spread into trade, merchandise and tertiary activity, such as private finance companies, was relatively new, the point is that the patels of Yadpalle were spreading into these sectors not by disposing of their lands but by investing the profits they had made from them.

More importantly, the landlord class transformed itself from a backward landowning class, dependent on relatively unprofitable crops such as castor, millets, pulses and groundnuts, to a landlord class which, by harvesting double crops of paddy, markets most of the produce and reinvests surplus either in urban properties and businesses, or spends it on luxury consumption. With respect to production relations, too, the Reddy landlords came increasingly to make use of either casual labourers, or Jeetham labour, that is, annual farm servants. And during peak agricultural seasons, such as transplanting and harvesting, they almost entirely came to depend on migrant labour. It is important to mention here that the patels, in 1960-96, combined the traditional social power of being a dominant caste with modern economic power. A brief look at the village politics confirms this.

Village politics are most conspicuously reflected in the gram panchayat (local village council) elections. The social power structure of villages often has crucial bearing on this electoral process; this is certainly the case with Yadpalle. In Nalgonda district, there was an armed struggle from 1946 to around 1952, led by the Communist Party of India (CPI, still united at the time) against the Hyderabad state ruler Nizam and most prominently against his local landlords. In Yadpalle, too, there was a branch of the CPI and it participated in the local council elections in 1959, in which a local CPI leader was elected. The CPI was just then emerging from the Telengana armed struggle. However, from 1964 to 1990, the local Reddy landlords ruled the village with complete dominance, because in the gram panchayat elections over this entire period,
they freely used their caste power and money, as well as liquor, to win over voters and get their caste members elected.

As we have mentioned earlier, by 1996, the Reddy landlords of the village had to a great extent consolidated their position economically and politically, without having been challenged by lower castes, or lower rungs of peasantry. State intervention also strengthened their position economically, in terms of canal irrigation and loans and subsidies for tractorization. The NABARD (National Bank of Agricultural and Rural Development) guidelines to local ADBs (Agricultural Development Banks) clearly stipulated that either 25 acres of single-crop land or 12 acres of double-cropped land be provided as guaranty for loans to purchase tractors. Obviously, it was the Reddys who had such lands and they have utilized this facility. By 1995, of 2,250 acres of canal irrigated land in the village, nearly 55 per cent was in the hands of Reddy landlords. Many of them managed to bypass the Land Ceiling Act through paper partitions. This is nothing new in the country; Andre Béteille (1996) observed the same in his study of Tanjore village in Tamil Nadu, where irrigation had similar impact. The total land owned by backward castes, that is, toddy tappers, yadavas, etc., was to the tune of 40 per cent. The remaining five per cent was owned by scheduled castes and tribes.

Politically, too, Reddy landowners ruled the roost until 1990. However, there was a change in 1995, in the gram panchayat elections held in June, when the village Sarpanch seat was reserved for a backward caste woman candidate and the MPTC seat (a block level, sub-district position of the Mandal Parishad Territorial Constituency Membership) was reserved for a scheduled caste candidate. Thus, it was inevitable that leadership would change hands from Reddys to backward and scheduled castes. However, the change was not dramatic. The local Reddy patels, who by 1995, had been divided along party lines among the Indian National Congress and Telugu Desam Party (TDP, a regional party in Andhra Pradesh), put forward pliant candidates. The TDP patels put forward a Yadava (a sheep grazing community) woman candidate for the Sarpanch seat, while the Congress patels put up a toddy tapper caste woman. The TDP Yadava caste woman won the election, with the support from the village branch of the CPI(M) (Communist Party of India (Marxist)). At the time of this study, TDP and CPI(M) worked in alliance, known at that time as National Front.
Case Study II: Gudur

Historical Background

Under Nizam rule, Gudur belonged to the Jagirdari system under a Velama caste, deshmukh. The deshmukh controlled a considerable proportion of land in the village. Out of a total of 2,411 acres of land in the village from 1900 to as late as 1940, the deshmukh family had about 400 acres of land under its control.12 Besides the Velama dora, there were other landowning families in the village. These were three Brahmin karanam households, which also held the Vatans. One karanam was patwari of the village while another karanam was malipatel. The kotwal or police patel post was in the hands of the Reddys. The Brahmin karanam families controlled around 500 acres. The Reddy patels held land to the tune of 1,000 acres. These Reddy families were more in number (around thirty), each with 20 to 40 acres of land. Reddy families were settled in a separate hamlet of the village, in which they live even today. The rest of the land (around 500 acres) was owned by the backward castes, such as yadavas, toddy tappers, etc., in the form of small and marginal holdings. The situation obtaining in 1960 was, however, somewhat different. This is because the Telengana armed struggle in this village against land lords (1945–51) had made a dent in the agrarian structure. During 1945–51, clashes and violence over land control took place. Some land was distributed among the lower caste small and marginal peasants; particularly, some 200 acres of land belonging to the Velama dora were distributed. One karanam Brahmin was shot dead. The excess grain in the granaries of the Velama dora was distributed. All in all, by 1960, the Velama landlord had about 200 acres of land, of which a portion (110 acres) was later sold to the Nizam Sugar Factory established nearby in the late 1970s, with the remaining partitioned among the three sons. Brahmin Karnams held around 300 acres and the Reddys held on to their 1,000 odd acres. Thus, by 1960, out of 2,411 acres of total land, around 1,500 acres were in the hands of the Velamas (200), Brahmins (300) and Reddys (1,000). These formed around 35 families, while the remaining 910 acres were held by the rest of the village, that is, mostly backward castes. Scheduled castes were only marginal landholders, besides being basically agricultural labourers.
Canal Water and Commercialization

Canal water came to this village in 1967. With the coming of the NSP water, the entire village shifted to rice monoculture. The village tank came to be filled by the NSP water, while the land under it was cultivated for two crops (551 acres). The rest of the 1,900 acres were cultivated mainly for one crop, while the second crop depended on the extent of rains and the release of waters from the NSP. In the absence of canal water for the second crop, the villagers would switch over to the production of pulses.

Gudur witnessed similar changes to Yadpalle on account of irrigation, in all the three important aspects, namely commercialization, tractorization and higher labour demand. Commercialization in Gudur occurred basically in relation to paddy production, following the pattern in the entire irrigated region. Irrigation turned paddy into a major marketable crop, with all classes of cultivators taking to paddy production for the market. While water came in 1967, HYV seeds arrived in the 1970s. These improved productivity and yield rates almost doubled. However, along with these, the intensity of agricultural operations also increased. The cultivators needed first to invest in fertilizers, seeds and pesticides; then the cultivation of HYV crops required much more agronomic care, such as more frequent weeding, guarding against new pests and intensive monitoring of crop, with yield rates depending on all these factors. Some of these aspects were important, because even in an iniquitously distributed land situation, not all landlords—not of all castes—emerged successful from intensified, more rigorous commercialized agriculture. The commercialization process involved two important aspects, namely more intensive care and management of agriculture and more intensive interaction with the urban market. Only those who could perform both the tasks efficiently survived the vagaries of the market, quite irrespective of how much land they owned. In this village, it was basically the Reddy caste landowners who showed the capacity to manage both their farms and the markets, while the Velama and the Brahmin karanam landlords failed in this respect and, consequently, had to dispose much of their land.

The Reddy landlords tractorized their farms fairly early. They brought tractors for two purposes: for using them on their own farms and for hiring out. By the 1980s, the availability and large-scale use of tractors,
amounting to around 25, transformed the entire agricultural scenario of the village. Not only the peasants who owned larger holdings used or hired tractors on their farms, but also small peasants owning less than an acre, thus replacing the bullock, bullock cart and the plough. The number of tractors in the village in 1996 was 39, of which 33 were owned by the Reddy patels. One Muslim peasant owned one tractor, while the remaining was owned by backward caste peasants.

Another aspect of commercialization which affected the village economy, was the land market. The price of land increased much in the same way as it did in Yadpalle. In the 1960s, the price per acre of land was between ₹50 and ₹80. In the 1970s, with the advent of irrigation, the price rose to between ₹2,000 and ₹3,000; by the early 1980s, the price had reached ₹65,000; by 1990, ₹100,000; and in 1996, ₹150,000. However, what was interesting was that, in spite of a rise in the monetary value of the land, not all landlords succeeded in keeping it under their control, by adapting to the changing agro-economic and agronomic conditions. The dominant landowning families in Gudur fared disparately between 1960 and 1990. As mentioned earlier, the Velama doras sold around 110 acres of land to the Nizam Sugar Factory in the late 1970s, while benefitting monetarily from the deal. They did not invest the money in agriculture but transferred it to urban pursuits. The remaining land, some 100 acres, was partitioned among the three sons of Velama dora’s family and overtime they too disposed of it, except for 25 acres. Their socio-political influence also declined, owing to the economic decline, political unimportance and social challenges emerging from below.

The karanam families could have strengthened their economic position in the period 1960–96, but they, too, sold most of their lands to backward castes and to new settlers from the coastal Andhra districts of Guntur and Krishna. The latter, generally more rigorous at farming practices, came to the region anticipating water from Krishna River. Thus, the karanam families, too, lost most of their land, with the three karanam families together owning around 25 acres. The process of decline among karanam families took place because of the giving of dowry at marriage and also because of generally wasteful consumption patterns. Even though, at present, the village revenue officer is a descendent of the karanam family, he does not command much social and political power or influence.
Tenancy Situation

Tenancy was an important aspect of the agricultural economy in this village, too. In the entire irrigated region, fixed-rent tenancy paid in grain came into practice in the late 1970s, replacing sharecropping, as in Yadpalle. The shifts in tenancy were also similar. Although assured irrigation certainly reduced the possibility of total crop failure, the ensuing process of commercialization made agriculture vulnerable to market fluctuations. The landlords increasingly shifted to renting out land on fixed rent in grain, preferring to spend time on non-agricultural pursuits as opposed to intensive cultivation. In this village, the general tenancy flows are shown in Figure 2.

As mentioned earlier, fixed-rent tenancy allowed landlords, particularly the Reddy caste landlords in this case, to spare time for urban jobs, businesses and also politics. The Reddy landlords of this village were very active in provincial and Mandal level politics, while the where-withal and time for politics come from their tenanted peasantry. The land rents in the early 1980s were about five bags of paddy per acre/per season; they rose to about eight bags in the late 1980s and between 10 to 12 bags by 1996, depending on soil fertility and location of the plot of land. For the second crop, generally, the tenants paid one to two bags less. There did not seem to be much of a trend toward fixed-cash rents in this village; but if this was the tendency in nearby villages, there was no reason why it would not appear in this village, too.

Generally the tenants, who were mostly from backward castes, reported losses. The holdings they cultivated were integrated completely into the market and, therefore, were vulnerable largely to its fluctuations. They had to hire tractors for ploughing and for much work at the time of harvesting, from the same landlords who rented out lands. Moreover,

**Figure 2: Tenancy Flows in Gudur**

<table>
<thead>
<tr>
<th>Renting out</th>
<th>Renting in</th>
</tr>
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<tbody>
<tr>
<td>Big landowners</td>
<td>Small peasants (backward caste)</td>
</tr>
<tr>
<td>(Brahmin, Reddy Velama)</td>
<td></td>
</tr>
<tr>
<td>Small peasants</td>
<td>Small Peasants (backward caste and scheduled caste)</td>
</tr>
<tr>
<td>(backward caste)</td>
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</tbody>
</table>

**Source:** Collected and compiled by the author.
small and marginal peasants also had to buy all the farm inputs (seeds, fertilisers, weedicides and pesticides) from the market. The prices for the finished product (paddy) would be generally at low ebb whenever they sold the product; they sold mostly at the peak seasons, that is, immediately after the harvest and could not afford to store the grain and wait till the prices climbed up. Owing to these reasons, many of the tenants interviewed complained that the only benefit they would have was the straw, which they got after the harvesting and which was useful for maintaining a few milch animals and covering the roofs of their thatched huts. But it is important to note that the majority of the landlords still cultivated their farms, employing wage and migrant labour; tenancy, despite being a conspicuous feature, was not an overwhelming one. The total tenanted land in the village constituted only 300 acres.

Migrant Labour

With the switching over to rice monoculture, the demand for labour increased. However, as in Yadpalle, local agricultural labour, consisting mainly of scheduled castes and secondarily of backward castes, fell short of demand and migrant labour poured in. Nearly 500 to 600 migrant labourers come to this village every year. They came four times if paddy was double cropped and twice if single cropped. Migrant labour came mostly from an adjacent mandal called Macharla and thus known as ‘Macharla labour’, but also from the adjacent coastal Andhra districts. Nearly three-fourths of migrant labourers went to work for the Reddy landlords, the other one-fourth meeting the demand of the remaining part of the village. The wage and working conditions of migrant labour were similar to those in Yadpalle.

Local Politics

In Gudur, gram panchayat elections always swung from one side to the other. The dominant castes, Brahmins, Velamas and Reddys, always stood for the Congress Party, while the backward castes largely stood for the CPI(M). The earlier elections, after the initiation of gram panchayat, from 1959 to 1975, were won by the Reddy patels from the Congress
Party. The CPI(M) started getting organized in the village from around 1975 onwards. However, the political arena in which the local Reddys participated was a larger one; the Reddy candidates from this village had won twice the State Assembly elections. Thus, this fact made them a formidable force within the village politics.

The CPI(M), which organized on issues of wages and better prices for farm produce, attracted the support of the backward castes. Interestingly, the scheduled castes, forming the majority of the agricultural labourers, supported the Congress party. In the 1995 gram panchayat elections, the village Sarpanch seat was reserved for a backward caste candidate and the CPI(M) candidate won the election by a thin margin. Everyone in the village agreed that, had the Sarpanch seat not been reserved, certainly a Reddy candidate would have won it.

Local politics demonstrated that the economically powerful dominant castes, which were strengthened by irrigation and ensuing agrarian change, were in a position to safeguard their socio-political dominance. They also demonstrated that the policy of electoral reservations could be successful only if it were backed by political mobilization from below.

**Conclusion**

This article has discussed the impact of irrigation on agrarian change and local politics in South Telengana, Andhra Pradesh, based on two case studies and a primary statistical survey. It has been argued that although the process of agrarian change following the introduction of irrigation strengthened sections of landlords, this has not led to a clear-cut polarization of agrarian classes. There has been polarization in the sense of escalation of economic inequality between agrarian classes, but this has been counteracted by persistence among the lower rungs of the peasantry which have been facing increasing problems of survival. I have also shown that agrarian change remains characterized by shifts in tenancy arrangements, influx of migrant labour and increasing penetration of the market. The policy implication that emerges is that irrigation without relevant agrarian reforms can further widen inequalities. Progressive agrarian change requires both irrigation ‘and’ agrarian reforms.
Agrarian change has also led to the continued hold of dominant landowning castes over local politics. However, state-induced political change in local politics, via electoral reservations, has created opportunities for political mobilization from below. The electoral reservations in local councils provide *de jure* opportunity for Dalits and lower castes to get elected and occupy positions of power. But for this to translate into *de facto* empowerment, there has to be genuine democratic mobilization from below. Otherwise, the economically strong dominant castes will always use Dalit and lower caste candidates as puppet candidates in their hands. There is by now a voluminous literature to this effect, building on the initial studies on local politics which had considerable insights (Jha and Mathur 1999). This is a reality which challenges mostly Dalit and women representatives across the country. In particular at the village level, local class and caste hierarchies do not allow for the free and fair operation of affirmative action policies, unless there is mobilization by Dalits and women.

**Notes**

1. The fieldwork for this research was conducted in May–July 1996, while the primary statistical survey was conducted in 1998. The issue of farmers’ suicides occurring in the countryside at present in Telengana and Andhra Pradesh, in general, began in 1997 and falls outside the purview of this article. I have discussed the agrarian crisis and farmers’ suicides in a separate paper (Anil Kumar 2005).

2. The critique of the acreage criterion is made by Utsa Patnaik (1987).

3. Owning/holding and controlling can be different, in the sense that a landlord may own or hold land but a tenant who rents in that land controls that land. Therefore, ownership and holding *ipso facto* does not automatically imply controlling a patch of land. This is important particularly in circumstances where tenancy is a commonly prevailing agricultural practice.

4. Land transfer to landlords is indicative of the strengthening of landlords, but the overall argument, to be elaborated below, is that there was a qualitative strengthening of landlords owing to the benefits of irrigation and tractorization.

5. The three different systems of land tenure were *Diwani* or *Khalsa*, *Sarf-e. khas* and *Jagirdari* systems. Each had distinct systems of tax collection, denoting different types of landownership rights for peasants.

6. These posts were called *vatans* and the system of administration through these was called *vatandari*. This hereditary system of village officers was subsequently abolished by the Telugu Desham Party in the early 1980.
7. This information is based on interviews with peasants in the village.
8. Figures are based on interviews with peasants and were crosschecked with the village administrative officer and other villagers.
9. In India, money is usually calculated in thousands, lakhs and crores of rupees, so we have followed that system of enumeration in this article.
10. Under sharecropping in this region, the tenant bears all the burden of labouring on the farm, in addition to bringing the seeds and sowing the crop. After harvest, the crop is split 50:50 between tenant and landlord.
11. For example, three of the Reddy landlords owned cars and almost all Reddy families in the village owned houses comparable to those of the urban upper middle class.
12. The figures are from village Pahani, or revenue records. Figures of land transfers are based on interviews in the village and cross-checked with village revenue officials.
13. The figures of changing land prices over time were collected through interviews with peasants and other villagers and were crosschecked with village revenue officials.
14. Enterprising farmers from coastal Andhra Pradesh have settled down in many parts of Telengana, wherever there exist fertile soils, good water supply and profitable farming opportunities. This is the case with the other Telengana districts as well.
15. The socio-political influence of vattandari (vatan holding) Brahmans and Karanams declined due to the abolition of those posts, as well as to economic decline. Partially, the abolition of these posts was also a political move of Telugu Desham Party in the 1980s to break the political hold of these elites in Telengana (Kistaiah 1990), who largely supported the Congress Party. Still, the social system in Telangana largely resembled that described by Wiser (1969), though in a slightly modified form owing to local historical contingencies.

References


