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SPECIAL LECTURE

**Agriculture in a Diversifying Economy – Village Studies
Perspective***

Judith Heyer[†]

In this lecture I stand back from current preoccupations and focus on longer term issues, following my involvement off and on for 40 years in research in a set of villages in western Tamil Nadu. I started working in these villages in 1980 with an interest in patterns of accumulation and investment and the inequality associated with these. What started as a short-term study developed into a long-term study, as has been the case with many long-term village studies in India.

The villages that I study have a strong well-fed agriculture and more non-food than food crops. There was a substantial expansion of small-scale decentralised industrial development in the vicinity from the mid-1980s on, and increasing numbers commuted from the villages as the industrial development progressed. The period over which I studied these villages, from the early 1980s to the 2010s, allowed me to look at a process of agrarian transition first hand and see the effects this had on agriculture as well as a number of other things. I focus in this lecture on the effects on agriculture of the development of the non-farm economy. Agriculture changed quite dramatically in the villages over the period during which I studied them. Focusing on the role of investment and accumulation as much as on costs, prices and profits has been helpful in studying this. I draw largely from the specifics of my study in this lecture, but a lot of what I have to say is of general relevance as well.

I have three observations to make before going on to the main substance of the lecture:

1. I have been struck by the extraordinary strength of the system of stigmatisation and discrimination faced by Dalits despite all the development, and despite all the policies aimed at tackling this. I have been struck by the system's resistance to change, its continuation despite all the developments taking place, as it continues to be an effective means of exclusion and control over labour. There is a large literature on this. Mosse (2018) has a good summary of what it means for Dalits. I have also written on it (e.g., Heyer, 2010; 2014a).
2. I have also been struck by the restrictions placed on women, the discrimination against women, the fundamental contribution of women, and the unequal rewards they get. There is a substantial literature on this too. The contributions in

*Special Lecture delivered at the 81st Annual Conference of the Indian Society of Agricultural Economics held under the auspices of Shri Mata Vaishno Devi (SMVD) University, Katra (Jammu & Kashmir) on December 1, 2021.

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Nagbushan *et al.* (2020) bring a lot of it together on which I have also written (Heyer, 2014b, 2017, e.g.).

3. I was also struck when I started out by what seemed a paradoxical combination of advanced capitalist agriculture and semi-feudal employment relations. These changed over time into the sort of contractual employment relations normally associated with the non-farm economy. I and many others have written on this too (Heyer 2010 *et al.*).

Over the period during which I have been studying the villages the position of the poorer sections of the population improved considerably. This does not mean that many in the villages are not still leading very impoverished lives. But when I started a large number of people in the villages were barely getting enough to eat. This is no longer the case. The current situation is far from good though, particularly, but not only, after Covid and all the setbacks associated with it.

The lecture begins with a brief overview of village studies in India, village studies vs larger scale survey and census statistics, and village studies vs other micro studies. It then attempts to study the links between agriculture and the non-farm economy, first in general and then at the household level. This is followed by sections on the proliferation of small and marginal landholdings and the aging of the farm population followed by a section on changing investment priorities including investment in social relations. The lecture then concludes.

1.1 *Village Studies(VS) and Long-term Village Studies(LTVS)*

India is the home of VS. Large numbers of VS have been conducted over time. The studies are very varied both in time and place and in what they focus on. VS used to be considered to be the preserve of anthropologists though the earliest VS conducted by economists date to the early decades of the 20th century (Harriss, 2016). VS bring out the specificity and diversity of villages, and remind us that villages which are close to each other can be very different from each other too. Some states are better covered by VS than others. There are organisations like ICRISAT¹ and the FAS (Foundation for Agrarian Studies)² that have conducted numerous VS in different parts of India over the years. There are large numbers of individual studies too, both recent and from some time back. LTVS are rarer, but growing in number. Himanshu *et al.* (2016a) has a good selection of chapters on LTVS. The ICRISAT website (vdsa.icrisat.ac.in) is another source. Tamil Nadu is particularly well represented in VS generally, both long-term and one-off (Harriss, 2016; Harriss-White and Janakarajan, 2004; Djurfeldt *et al.* 2008, Harriss and Jeyaranjan 2016), as are Bihar (Rodgers *et al.* 2016), and Uttar Pradesh (Lerche, 1999, Srivastava, 2016, Himanshu *et al.* 2018). Andhra and Maharashtra, both of which have villages in the ICRISAT and the FAS programmes, are well represented too.

The body of VS as a whole is rich. It has added a whole new dimension to our understanding of rural areas. It gives us insights that aggregate statistics cannot give. It helps with the interpretation of aggregate statistics as well.

Questions are often asked about representativeness. Many villages have features shared by large numbers of villages in India, with local variations. Others are distinctive. The point is not whether the villages are representative but whether their study provides insights into issues and processes that are of wider relevance too.

1.2 VS and Larger Scale Surveys and Censuses

Larger scale surveys such as those of the NSSO and the NFHSO, together with the Population Census and the Agricultural Census, bring out some of what has been happening across the country as a whole: decrease in population growth rates, decrease in sizes of landholdings, increase (and decrease³) in non-farm employment, and more.

VS taken together also bring out general trends such as changes in market relationships; changes in relationships between households in different class and caste groups; changes in labour relations; the decrease in the power of big landowners; and the differential working of MGNREGA and the PDS. VS have made particularly strong contributions on the gradual move from tied or bonded agricultural labour to contractual employment relations more akin to those in the non-farm sector.⁴ They have also made strong contributions on the changing character of the landowning elite.

Aggregate statistics provide a good basis for comparisons between regions and states. This is particularly true of the Population Census which does not rely on samples though the number of variables it includes is limited. Large scale surveys such as those conducted by the NSSO and the NFHSO provide all-India information but they rely on relatively small samples that are not able to capture the situation in different states very well. Their all-India estimates can be very different from each other too as seen for example in the estimates of numbers of landholdings and distributions of landholding sizes.

VS provide a good basis for comparisons between different types of villages, not just wet vs dry, north vs south, one region vs another. They bring out the differences between small villages and large villages, villages from which there is a lot of commuting to non-farm employment, villages from which there is a lot of migration, seasonal or longer-term, and villages that are relatively self-contained, villages that are predominantly agricultural still. They bring out differences between villages in which there are substantial non-farm activities, villages that are on the outskirts of urban areas, and villages that are further from urban areas and more agricultural. It is important to know which type of village one is dealing with. There is also a lot to be learnt from drawing comparisons between different types of villages, telling us about what matters and what does not.

1.3 *VS and One-off Village Level Studies*

One-off studies of specific questions at the village level are not as open-ended or all-encompassing as VS, concentrating as they do on narrower and largely predetermined sets of questions and variables. They also have a lot to contribute however.

1.4 *My LTVS*

The study on which this lecture draws is one of a relatively small set of LTVS through which it has been possible to study village level processes over time. I was fortunate in having started my study when the villages were still predominantly agricultural and being able to see how they were affected by the growth of the non-farm economy that made an increasingly strong impact over time. The study covered the period from 1980 to 2018. It does not extend into the Covid pandemic and all the disruption that that has caused.

One of the difficulties of LTVS is that the early rounds often do not cover variables that become of greater interest over time. They often miss variables and issues that are only recognised later to have been crucial from the start. I was fortunate on the one hand in having decided to study investment and accumulation, long-term processes, in the first place. One of the many things I regret on the other hand is the fact that I did not collect more data on women's activities in the earliest round.

2.1 *Agriculture in an Economy in which Non-Farm Activities Play an Increasing Role*

I focus in this lecture on what drives agriculture as the non-farm sector plays an increasing role. Survey statistics and other aggregate statistics show the increasing role of the non-farm sector in India as a whole. VS add detail on the way in which farm and non-farm activities interact at the household level, looking at questions such as how farm and non-farm activities complement and/or compete with each other. The non-farm sector has a more direct impact in some areas than others. It has been particularly important over the period concerned in the villages that I study.

Much of what goes on in agriculture is determined by what is happening in the non-farm economy. In the more successful scenarios increased demand for agricultural products, and in particular higher valued agricultural products, and improvements in the supply of inputs and finance, are associated with the development of the non-farm economy as are shortages of labour and increase in wages and the cost of labour in agriculture (Johnston and Mellor, 1961, Mellor, 1995, and Reddy *et al.* 2014). Agriculturalists complain bitterly about shortages of labour and increases in labour costs, failing to acknowledge the changes that offset these at least to some extent. The extent to which the state continues to support agriculture and how it does this matters

here too. Agriculture has been getting less support as the state has been focusing more on the non-agricultural sector (Ramachandran and Rawal, 2010).

It is important to recognise that both agriculturalists and agricultural labourers benefit from the non-farm economy doing well. The non-farm economy has not been doing well enough in recent years in India for many of the potential benefits to be realised. Low levels of growth and poor quality employment in the non-farm economy have limited the possibilities for agriculture. Trade and other policy changes have played an important part increasing the difficulties for agriculture in India recently too.⁵

Responses to the growing importance of the non-farm economy differ in different contexts. The villages I study are good examples of some of the ways in which agriculture changes in response to the growing importance of the non-farm economy. They have had quite a dynamic process of industrialisation taking place in their vicinity. The important point is that agriculture changes very substantially with the growth of the non-farm economy though both the extent of the changes and the manner in which they occur vary across India as a whole.

In the early 1980s the villages that I study were relatively remote and self-contained and I was struck by the extent to which they were dominated by agriculture (Heyer, 2010). This was a well-irrigated agriculture. It was also an agriculture that was already relatively commercialised, growing a wide range of crops many of them non-food crops. In the late 1980s and early 1990s the villages became more closely integrated into the regional non-farm economy as transport and communications improved and there was an expansion of small-scale enterprises that were relatively informal, easy to enter, and decentralised. Growth centred on textiles and engineering and a variety of light industrial products and this provided employment opportunities within the easy reach of the villages as the dominance of formal sector employment decreased. Village residents commuted to these new forms of employment. They did not have to migrate. Similar expansions of non-farm employment in the 1980s and 1990s have been documented in VS elsewhere. Himanshu *et al.* (2018) for example show a similar increase in non-farm employment occurring in a very different context in Uttar Pradesh.

In 1981/82 and the run-up to 1981/82 in the villages I study the electrification of the irrigation system, and increased production of higher yielding crops responding to increased use of purchased inputs, fuelled agricultural dynamism. There was a lot of well digging following electrification and the use of purchased inputs in crop production increased. The intensification of agriculture was accompanied by a reduction in both the number and the size of large landholdings and small and medium-sized holdings began to dominate. When I first visited the villages the visits of agricultural extension officers were keenly awaited by agriculturalists eager to hear about the latest developments coming from the TNAU (Tamil Nadu Agricultural University). There were also state programmes such as those spearheaded by the SFDA and the MFALDA that were directed explicitly at small and marginal farmers a large number of whom benefitted from the acquisition of livestock and equipment at

reasonable rates through these programmes. Agriculturalists were re-investing their profits in agriculture in 1981/82. They were optimistic about the future of agriculture. Most saw no need to invest in any other future for their sons.

By 1996, when I re-visited the villages, all this had changed. Developments in the non-farm economy were now driving changes in agriculture together with the continuing deepening of the water table that had already been a problem in 1980 (Heyer, 2019). Labour shortages were emerging and water shortages had become acute. Agriculturalists were responding by increasing their reliance on crops that were less labour intensive and less water intensive crops for which the non-farm economy was providing better markets as well as by adopting new irrigation technology. Cotton which had dominated the landscape in the early 1980s was on the decline and plantains were on the rise. Agriculturalists had also been mechanising, replacing bullocks with tractors, trucks and other motorised vehicles. The role of the TNAU was less dominant as was the role of the extension services giving advice on crops and agronomic practices. This may have been inevitable with the increased focus on the non-farm economy but it was taken too far (Ramachandran and Rawal, 2010). Agriculturalists were no longer getting the support on which they had previously relied. They were no longer ploughing all their profits back into agriculture either in 1996. They were investing in education, and non-farm businesses, and in houses as status symbols improving the prospects of good marriage alliances. This was still a dynamic agriculture however, responding to the growth of the non-farm economy (Heyer, 2019). In the 2000s and 2010s there was less land under cultivation and there was more investment in drip irrigation, first introduced in the late 1990s. There were also some moves into ‘organic agriculture’ and ‘zero budget natural farming’.⁶ This was a response to the increasing toxicity of soils and the increasing cost of inputs, as well as the fact that the technology and knowledge around these new farming systems was spreading. It needed more active state R&D and other support if they were to be more generally adopted though.

2.2 Agricultural and Non-Agricultural Activities at the Household Level

VS show both the growth of non-agricultural activities and the connection between agricultural and non-agricultural activities at the household level. There are not just two separate groups of households, agricultural and non-agricultural. Many households have a foot in both camps.⁷ They diversify as the non-farm economy grows both by investing in non-farm activities, and by having household members engage in non-farm activities. This applies as much to the agricultural labour households as to agriculturalists.

There has been a general change in India over the recent period with a reduction in the number of villages dominated by relatively wealthy farmers many of whom have a foot in the non-farm economy,⁸ and an increase in the number of villages from which much of that elite has left and what remains is a much less numerous and less wealthy

elite and a large number of people with smaller landholdings many of whom have a foot in the non-farm economy at a much lower level. The great majority of landholdings in India are small (1-2ha) and marginal (less than 1ha). Moreover, the role of non-farm activity decreases with the size of landholding. It is much greater among smaller landholders than the large landholders (Government of India, 2021).⁹ Larger landowners supplement agriculture with business and political activities though less so than earlier. Many of them have let go of agriculture as they have moved to the towns. Many agriculturalists both large and small have income coming from sons' involvement in the non-farm economy however. Many of the smaller landowners also supplement their income from farming with wage employment, much of it irregular and casual, much of it agricultural. Others supplement their income with self-employment which may be more flexible and also in some cases more lucrative. Agricultural labourers likewise supplement their income with income from non-farm sources because they do not have enough agricultural work. As Himanshu *et al.* (2016b, p.305) state with reference to Palanpur, looking at this from the point of view of the non-farm economy in the 2010s "most of the individuals who work as self-employed and casual workers in non-farm jobs do so along with some involvement in agriculture". This was true in the villages I study as well.

Non-farm activities are a substantial source of income in village economies, underpinning both the distribution of wealth and power and the survival strategies of the poor. Substantial amounts of labour and capital are devoted to non-farm activities. Some of this involves seasonal or temporary migration, some commuting, and some takes place within the villages themselves.

2.3 Why There Are So Many Small and Marginal Farmers

In some of the theories of agrarian transition in Europe people are forced off their land and/or let go of their land when they move into non-farm occupations leaving smaller numbers of people with larger holdings in agriculture. Others point to the persistence of petty production and part-time farming both in Europe and in the US.

In India or in other parts of the world undergoing agrarian transition at a later stage both the fact that the population has continued to grow and the fact that substantial numbers of smaller landholders engaged in non-agricultural activities have been hanging onto their land has meant that the number of small and marginal landholdings has remained high. According to one source, small and marginal holdings now account for 89 per cent of all agricultural landholdings in India (Government of India, 2021).¹⁰ The number of marginal holdings has been increasing over the recent period. Whether this will continue and for how long depends on population growth which has been slowing down and on the extent to which people are ready to relinquish their agricultural landholdings as they move into the non-farm economy.

Many people with small and marginal landholdings have been holding onto their land while moving into the non-farm economy because of the risk and insecurity of

non-farm employment and self-employment, and because of the lack of provision for old age outside agriculture, and because of the lack of acceptable environments for dependents in the urban areas. Agricultural land may also be being held onto as an asset on the basis of which to get credit and/or as an asset that might be valuable later on. It is not only the village residents that have been holding land as an asset that might be valuable later on either. There has been a growing number of people far removed from rural areas buying agricultural land as an investment. This is something that has received a considerable amount of attention (Chakravorty, 2013, Fairbairn, 2015, Vijayabaskar and Menon, 2018). It was occurring on a significant scale in the villages during my study in the 2000s and 2010s. Some of this land was being left idle. Some was being converted into housing layouts. Some was being used as industrial sites, sites for solar panel arrays, and sites for ‘resorts’.

Agriculture is an important form of insurance for people moving into the non-farm economy. It keeps people going while recovering from setbacks. It provides alternatives in the face of setbacks too. There were many examples in the villages I study in which unsuccessful forays into business activities in urban areas resulted in people returning to agriculture, either permanently or while they re-grouped. There were also examples of people losing jobs who returned to agriculture.

Agriculture provides for old age, which is something that is not well provided for in the non-agricultural economy. There were many examples in the villages I study of land lying idle, or being looked after by brothers or parents, and being taken back later as people aged. Very little of this land was rented out, both because there were not many takers and because people were unsure of getting it back.

There are gender aspects of all this in a context in which few women own land in their own right. Women often look after land while husbands and sons are working elsewhere. There were a number of examples in the villages I study of people working elsewhere whose wives or mothers continued to cultivate, or to supervise cultivation in the villages.

What is significant here is that in 2018/19 less than half of the agricultural land in India was estimated to be in the hands of the 11 per cent of farmers who had large and medium holdings most of whose income came from agriculture on average over the group as a whole, while more than half of the agricultural land was estimated to be in the hands of the 89 per cent of farmers who had small and marginal holdings for whom agriculture represented a relatively lower proportion of income on average over the group as a whole. This did not mean that there were not significant numbers of small and marginal farmers whose main source of income was agriculture. It just meant that there were more for whom this was not the case. It is important not just to see agriculture as a welfare solution for this latter group though that is a valuable role that it plays. This is a group that could make an important contribution to the economy too. There needs to be policies that support their agriculture. There could be policies to support intensification. More attention could be paid to crops more relevant to small and marginal landholders, crops which could be more successful on smallholdings than

large. More attention could be paid to smaller scale mechanised equipment which is still very little used on small and marginal holdings in India (Biggs *et al.* 2011). Other approaches might include support for co-operatives and women's groups. There are many parts of the world that rely almost entirely on smallholder agriculture. India could learn from some of these too.

2.4 The Aging of the Farm Population and Inheritance and Sub-division

The rate at which the farm population has been aging has been increasing as the role of the non-farm economy has increased. This is not necessarily a sign that the younger generation is no longer interested in agriculture. It is also that young people do not want to work under the control of the older generation. It can also be because landholdings are not large enough to occupy parents who are still active and their adult sons.¹¹ Earlier, most sons worked with their fathers in agriculture. Now many of them go and work elsewhere and come back later when the older generation bows out. Others of course go and work elsewhere and do not come back. The net result is that there are fewer young adults contributing to family labour but not as few without an interest in family land. There is an important distinction between households that live separately on the one hand and households that have a common stake in household land on the other. Many of these latter may also be supporting parents who are still living on and/or looking after family land.

There are important questions about how households evolve over the generations, whether and for how long parents continue to operate together with their sons, how and when sons move into separate households, and when and how subdivision takes place. VS show power shifting to the younger generation who are more educated and as the role of the non-farm economy has increased. When sons farm with their parents, power shifted slowly as parents aged, and sub-division took place late on. Now sons often separate early from parents, many of them moving away. Education, the availability of non-farm opportunities, and increased ease of communications and connectivity, have all contributed to sons being more independent than they used to be, not as much under their parents' sway. There are not as many extended families these days. Reductions in fertility have also meant that there are no longer such large numbers of brothers or sons.

There were a number of people in the villages I study who worked outside agriculture when they were young and came back in agriculture when they were older. Some of those who had come back had spent their 20s and 30s working in the non-farm economy and come back in their 40s. Others had worked in the non-farm economy until their sons were established, coming back in their late 40s, and their 50s. There were also people coming back in their late 50s after retirement. This meant that there was a group of middle-aged and late middle-aged people who had had experience elsewhere many of whom were concentrating on agriculture and making a success of it. They were significant agriculturalists.

There were also one or two well educated people who came back when they were still young. These were people with claims on relatively larger landholdings who did not have members of the older generation standing in their way. One of them had been on one of the TNAU programmes that were training a new generation with higher education and technical skills to go into agriculture. The difficulty with these programmes is access to land. There are not many whose parents are not still very much in control of the family land. Leasing is a possible alternative which some of these young educated agriculturalists are taking up. There were none such in the study villages though.

3.1 Long Term Strategies of Investment and Accumulation

Investment was central to earlier theories of agrarian transition, agricultural surpluses being channelled into industrial investment, agriculture providing the capital to enable industrial investment to take place. It is now recognised that this is no longer necessary as other sources of capital are available (Bernstein, 1994). Agricultural surpluses are still being invested in non-farm activities however and in education as well. Less of the surplus is ploughed back into agriculture though some still is. Marriage continues to be an important claim on agricultural surpluses, and investment in houses often features quite strongly in relation to marriage strategies too.

In the case of the villages studied there was a heavy focus on agriculture in agriculturalists' investment and accumulation trajectories in the run-up to 1981/82, daughters' marriages being the only really significant competing claim. A lot of the investment was in irrigation which needed constant investment and re-investment even to maintain the status quo. Land improvements featured strongly too as did land purchases at that stage. What surprised me when I first started studying these villages was that agriculturalists who were making sophisticated calculations about investments driven by profit and loss, talked of investment in daughters' marriages at par with investments in agriculture. Daughters' marriages were playing a key role in relation to the reputation of the family as well as the creation of connections and alliances that fed into agriculture (Heyer, 1992). This was a region in which there was cross-cousin marriage and continuing contact between daughters' marital and natal kin.

By the mid-1990s in the villages studied agriculturalists were investing heavily in education, and also in non-farm enterprises, as they no longer saw a future in agriculture for their sons. Many were still investing in agriculture as well. Investment in education involved the loss of young adult labour as well as direct financial expenditure and it took time to bear fruit. It was less common to find agriculturalists investing in non-farm enterprises, though some were doing this too. In the 2000s and 2010s wealthier agriculturalists were investing more heavily in education and they were investing heavily in houses as well. Houses were being used as status symbols, many of them linked to marriages. People were still spending large sums on daughters' marriages and giving substantial dowries. The marriages of sons were an increasing

concern now as well (see below). This was a context in which kin and caste relationships continued to play a crucial role.

3.2 *Investment in Sons' Education*

The level of education in the study villages was surprisingly low in the early 1980s. Being educated up to Standard X was considered enough even for many of the more prosperous agriculturalists. It was rare to find agriculturalists whose sons had more than secondary education. The exceptions stood out from the rest.

By 1996 participation in education had increased at all levels and significant numbers of sons in agriculturalist households were completing Standard XII, and getting Bachelors, and even Masters, degrees. By the 2000s and 2010s, more sons in agriculturalist households had higher quality further education, more of them engineering degrees and MBA's. People were pursuing education to open up non-farm alternatives that were increasingly available. Parents hoped that their sons would be able to use education as a route into better positions. These were aspirations that were often unfulfilled. Many of the less successful ended up in agriculture or in lower level employment in the non-agricultural economy. The general level of education of agriculturalists increased.

3.3 *Investment in Marriages*

Daughters' marriages have always represented an important investment in social capital, particularly important in agrarian societies, pointing to the importance of households as units of production, and kin relationships substituting for institutions that are not organised around kin relationships (Guerin *et al.*, 2019). Investment in reputation, social relationships, and connections continues to figure strongly in India as economic investment shifts away from agriculture towards the non-farm economy. Daughters' marriages continue to be a matter of pride and maintenance of reputation that many find it difficult to afford.

The area in which the villages studied are located is an area in which there are continuing relationships between daughters' marital and natal kin and daughters' marriages are opportunities to cement and build valuable connections and alliances. The expenses of marrying daughters included dowries and what were often lavish expenditures on celebrations involving large numbers of people. The amount of time and energy devoted to attendance at other people's marriages and other life cycle ceremonies was striking in the population at large as well as the amount invested where people's own children were concerned.

In the early 1980s in the villages I study agriculturalists were preoccupied with the problem of finding suitable bridegrooms for their daughters. The onus was very much on daughters' families to find bridegrooms and this was not an easy task. The education daughters were getting was very limited because education was thought to damage their

marriageability. Men were very poorly educated at that time and it was not thought advisable for men to marry wives more educated than themselves.

This changed as educational provision improved, the general attitude to education changed, and men got more educated. Women's education increased enormously over the 1980s and early 1990s, almost catching up with the increased levels of men, though women did not get as high quality college education as men.

By the 2000s and 2010s people were actively seeking brides with more education to make up for their sons' lack of education. It was not that they wanted educated women to earn. Educated women were being sought to help their husbands in their economic activities, agricultural and otherwise. Few were allowed to go into white collar employment even if they had college education. Women were under the control of their husbands and their husbands wanted them to support them at home. Women's roles in relation to their children's education were not stressed. It was their role in supporting their husbands that was key.

While educated women were being sought after, it was also becoming more difficult for men to find brides as a shortage of women had emerged. This was partly due to a declining F/M ratio,¹² partly also due to parents not wanting to marry their daughters to agriculturalists. It was also the fact that daughters were better educated and that made it easier to find bridegrooms who were not agriculturalists, in urban as well as in rural areas. It might be thought that all this meant that it was no longer necessary to spend so much on daughters' marriages. It was however considered necessary to marry daughters well to make it possible to do likewise for sons.

One of the things learnt through studying these villages has been what an important contribution investment in marriages and social relations make to economic success in contexts such as these. Investments in marriages and social relations are on par with 'economic' investment in such settings and they should be recognised as such.

IV

CONCLUDING REMARKS

The study on which I have drawn in this lecture is from a very specific context, a context in which non-food production dominated, irrigation was from wells and not canals, and local non-farm employment though poor quality was plentiful. Agriculturalists were strong, hard-working, and enterprising, used to varying crop mixes in response to changing market conditions, used to keeping abreast of new technology, used to continuous investment, used to taking risks. Agriculture could be seen as a business like any other with a lot of small-scale informal sector activity and enterprise and skills on which one could build. Agriculture was finding a new place as the non-farm economy developed, as smaller numbers of agriculturalists cultivated smaller areas of land, and those that continued in agriculture saw their incomes and standards of living increasing on a par with those of their counterparts in the non-farm economy.

Other village economies based on migration, food crop production, canal irrigation, et al. are very different. All face some of the same general issues though. These include the continuation of a reasonably successful agriculture, a very high proportion of small and marginal landholdings, and the fact that more farmers are middle- and later middle-aged than young. Despite the fact that investment resources are increasingly being directed towards the non-agricultural economy there is still a lot of investment going into agriculture. It may be a slimmed down agriculture but it continues to make an important economic contribution nevertheless. With adequate support it will continue to make important contributions in future too.

This lecture has been based on what I have learnt from studying agriculture in an area which contributes very little to the basic food supply. A variety of minor food crops are produced, in small quantities, but very little paddy or wheat. Where the production of paddy and wheat are concerned many of the points I am making still apply. One cannot treat paddy and wheat production as any other business though. Much more clearly needs to be done to ensure that enough foodgrains continue to be produced. Small and marginal farmers make important contributions here too.

One has learnt a lot from Covid in 2020 and 2021 which has both brought out the importance of agriculture as something to which people turn as a last resort, and which has reversed a lot of the progress of the last few decades as well. We have learnt a lot about the retreat into agriculture, and the retreat into dependency. Some of the underlying trends alluded to in this lecture will come to the fore when things start moving ahead again. The problem of how to strengthen the economy so that both agriculture and the non-farm economy thrive will have to be re-visited, noting that their interactions contribute to their strength.

NOTES

- 1) vdsa.icrisat.ac.in.
- 2) www.agrarianstudies.org.
- 3) There was a move back into agriculture between 2018-19 and 2019-20 for first time after a substantial move in the other direction which slowed down before it was reversed, according to data from the NSS 77th Round released recently (Government of India, 2021).
- 4) Breman (1974) has one of the best accounts of what the transition from bonded labour to casual labour means both for labourers and for agriculturalists. See Carswell and De Neve (2013) for a more recent discussion relating to villages not far from the ones that I study.
- 5) In addition to the general decrease in state support for agriculture these include things like the 2005 WTO agreement which decimated the edible oils sector. They also include the new farm laws about which farmers have been protesting so vigorously in 2020 and 2021.
- 6) The terms used for different attempts to move away from the use of chemical inputs are confusing. Both 'organic farming' and 'Zero Budget Natural Farming' mean different things in different contexts. Both terms are loosely applied.
- 7) The recently published results of the 77th NSS round show only 53 per cent of the average income of agricultural households in India coming from crop and livestock production in 2018/19 (Government of India, 2021). The figure varied from 19 per cent in Jammu and Kashmir, and 22 per cent in Kerala, to 74 per cent in Meghalaya and 66 per cent in Madhya Pradesh.
- 8) See Harriss "provincial capitalists with a foot in agriculture" in Tamil Nadu and also Balagopal, 1986 and Upadhyaya, 1988 on Andhra.

9) According to the same source (Government of India, 2021), those with 0.1-0.4 ha and those with 0.4-1 ha were getting on average 28 and 47 per cent of their income from crop and livestock production; and those with 1-2 ha, 2-4 ha, 4-10 ha, and 10 ha or more were getting 60, 70, 80 and 90 per cent.

10) These figures are from the latest round of NSS surveys (Government of India, 2021). The figures derived from other sources differ somewhat from these. The basic point remains however that a large proportion of agricultural land is now in the hands of small and marginal farmers.

11) It is sons and not daughters that are relevant here. Daughters do not generally inherit household land.

12) There had been limits to the numbers of daughters, infanticide and then foeticide being used to ensure in a context of reduced fertility that families always had sons (Heyer, 2017).

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