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Alleviating Poverty by Linking Smallholders with Agribusiness: Roles of Social Capital and Common Property*

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Abstract:

Recent decades have witnessed a marked acceleration of agro-industrialisation processes in much of the developing world. This is opening up new opportunities for smallholders, even in isolated areas, to escape poverty by trading in the resulting new markets. There is, however, increasing recognition of the constraints faced by poor smallholders in becoming competitive within such markets. There has also been deepening awareness of the knowledge gaps impeding the design of institutional arrangements capable of surmounting these constraints. The concept of 'social capital' has found itself at the centre of efforts to address these knowledge gaps.

The focus in this paper is on examining what is known about: the challenges of ensuring that the poor share equitably in the benefits of market liberalisation; the extent to which these challenges involve social capital issues; and how such social capital issues might be addressed most effectively. Included in the review is a summary of findings relevant to these issues from recent research in Indonesia – concerned with contract farming and micro-finance delivery, respectively – involving two of the present authors. A proposal for further research involving all four authors is also presented. The research aim is to evaluate the role that social capital plays in Bali and Lombok (eastern Indonesia) in reducing rural poverty by helping smallholders access market opportunities arising from trade liberalisation. A particular focus would be on understanding of the conditions under which social capital in the form of common property institutions helps smallholders to access such opportunities.

Keywords: social capital, common property, poverty, rural development, agro-industrialisation, transaction costs, path dependence.

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1. Introduction

Recent decades have witnessed a marked acceleration of agro-industrialisation processes in much of the developing world. This is opening up new opportunities for smallholders, even in isolated areas, to escape poverty by trading in the resulting new markets. There is, however, increasing recognition of the constraints faced by poor smallholders in becoming competitive within such markets. There has also been deepening awareness of the knowledge gaps impeding the design of institutional arrangements capable of surmounting these constraints.

The concept of ‘social capital’ has found itself at the centre of efforts by scholars, policy makers and practitioners to understand and develop institutional interventions that might help the poor share equitably in the fruits of economic growth yielded by agro-industrialisation. The present paper represents one such effort. Our interest in the role of social capital in rural development and poverty alleviation arose from two recent research projects in Indonesia undertaken by two of the present authors¹. Those research experiences led to the development of a new research proposal focused specifically on the potential and practicalities of social capital helping smallholders in Bali and Lombok (adjoining islands in eastern Indonesia) to compete in emerging agri-food markets². This proposal is outlined in section 8.

Nevertheless, the main focus of this paper is on examining what is already understood about: the challenges of ensuring that the poor share equitably in the benefits of market liberalisation; the extent to which these challenges involve social capital issues; and how such issues might be addressed effectively. In the next section, therefore, we turn our attention to understanding agro-industrialisation processes in the developing world and their consequences for smallholders. In section 3 we discuss the obstacles that institutional path dependence places in the way of smallholders availing themselves of the opportunities arising from agro-industrialisation, and the risk that agro-industrialisation will widen existing income inequalities unless innovative strategies are devised to surmount these obstacles. Recognising that much of the focus nowadays in developing such strategies revolves around the concept of social capital, this concept is discussed in section 4.

Among scholars interested in the role of social capital in helping smallholders compete in emerging markets, considerable attention has been devoted to exploring how collective action by smallholders via common property institutions might enhance such competitiveness. The relevant literature is reviewed in section 5. A key finding of that literature is that the ‘internal’ social capital required by smallholders for collective action is often not enough to allow them to compete successfully in new markets. Normally it must be complemented by ‘external’ social capital in the form of relationships with individuals or organisations able to inform them of new opportunities and focus their energies towards those opportunities. The challenges of acquiring this type of social capital are discussed in section 6. Details of the earlier research involving two of the present authors are then presented in section 7, firstly in order to elucidate further the

¹ These projects were both funded by ACIAR. Patrick was involved in the project ‘Contract farming, smallholders and rural development in East Java, Bali and Lombok’ (ADP/2000/100), while Muktasam was involved in ‘Microfinance for agricultural producers in NTB Province, Indonesia: Issues and opportunities for a sustainable financial intermediary system’ (ADP/2000/126).

² This proposal is under review by ACIAR.

issues covered in sections 2-6, and secondly to provide background for the research proposal outlined in section 8. Closing comments are presented in section 9.

2. Rural development in a globalising world

Integration of markets around the world has been underway since at least the early 9th century. However, it has accelerated to an extent in recent decades that it has become known widely as ‘globalisation’ (Borghesi et al. 2003). This process has been, and remains, driven by agents striving to enhance their competitiveness by reducing their production costs through economies of scale, division of labour, and specialisation.

In so far as market integration has been driven by rewards from division of labour and specialisation, thus increasing the need for market exchange, it has been constrained by the transaction costs of this exchange (North 2005). Its dramatic acceleration in recent decades can be attributed to reductions in transaction costs brought about by new information and communication technologies including television, communication satellites and the internet (Borghesi et al. 2003), and by policy reforms over the last two decades seeking to liberate international trade from government restrictions (Meseguer 2006).

Market liberalisation under these reforms was identified by Johnson et al. (2004) as one of two fundamental global tendencies fuelling a process of agro-industrialisation that is profoundly changing agriculture in the developing world. This process is bringing markets increasingly in reach of remote rural areas. At the same time, market liberalisation is raising the pressures on agro-industrial enterprises in developing countries, and the farmers supplying them, to compete internationally rather than just locally or nationally. The other tendency involves increasing demand for high-value and processed food products as a consequence of rising income levels and demographic changes (e.g., urbanisation and increased female participation in the labour force). One implication of these tendencies is that agri-industries in the developing world are required increasingly to compete on the basis of product quality as well as price, especially with a growing share of their sales going to ‘fussy developed country consumers’ (Winters et al. 2005 p.65). Another is that exports of food products not traditionally produced in developing countries are coming to account for a growing share of their total and export agricultural income.

Three main characteristics of the agro-industrialisation process were identified by Johnson et al. (2004). The first stems from division of labour and specialisation, and the consequent growth in off-farm activities linked to agriculture, including supply of farming inputs and processing, distribution and sale of food products. The result is the emergence of ‘supply chains’. Each such chain is a system within which a product proceeds from the farmer (‘upstream’ in the chain) through processing, distribution and retailing to the consumer (‘downstream’). The second characteristic stems from pressures to coordinate the timing and quality of purchases and deliveries all down the supply chain. Early pressures came from the need to manage perishability, but these have been supplemented since by others including those arising from economies of scale in managing market information. The outcome has been growing levels of integration among actors in the supply chain. The third characteristic involves the changes in products, technologies and market structures that accompany the growing number and integration of actors.

The second characteristic is illustrated dramatically by the estimates of Reardon et al. (2002) that supermarkets in Latin America increased their share of food retailing from 10-20 per cent in 1990 to 50-60 per cent in 2000. Such shifts are increasing the power of supermarkets and food manufacturers (typically national or multi-national in scale) relative to upstream segments, including first-stage processors (typically local in scale) as well as farmers, such that the former are increasingly able to 'set the rules' by which supply chains develop and integrate. Despite any gain in their power compared with upstream actors, downstream actors must still compete for market share by reducing their costs, increasing quality and diversity in their product lines, and maintaining consistent supplies. Increasingly in developing countries, the strategy for doing so has entailed contractual relationships with farmers, first-stage processors and other upstream actors, and such relationships are expected to multiply as market liberalisation proceeds. Winters et al. (2005) reasoned that this choice of strategy follows from the high transaction costs of emerging spot markets for high-value food products, and consequent consideration of contract farming (partial vertical integration) as an alternative way to transact.

Contracting has potential to advantage many smallholders. To the extent that their opportunity costs are relatively low, they may be attractive to downstream actors – particularly where the production required is labour-intensive. Indeed, agencies concerned with reducing rural poverty see it as a way for smallholders and local agro-enterprises to share in the expanding markets for types of high-value food products (e.g., dairy and fresh fruit and vegetables) that offer relatively high potential for value adding and income generation while requiring relatively little to achieve economies of scale. Smallholders typically are unable to realise this potential through spot markets for these products because the transactions costs of accessing the goods and services needed to supply these markets are often prohibitive (Simmons et al. 2005). Contracting can help smallholders overcome these obstacles in so far as it entails downstream firms sharing their market knowledge and experience, technical know-how, legal expertise, economies of scale in processing, and the distribution networks and financial clout needed to launch and maintain international trade relationships.

The smallest and poorest landholders often miss out on the market opportunities opened up through contracting, however, because the high transaction costs of contracting them compared with larger landholders (due to fixed transaction costs incurred per contract) tend to outweigh any production-cost advantages the former might offer. Concerns that larger farmers are favoured by contractors, so that poor smallholders tend to miss out on the development opportunities offered by contracting, have been raised accordingly in the literature (e.g. Commonwealth Development Corporation 1989; Little et al. 1994; Patrick 2004; Runsten 1992). Johnson et al. (2004 p.1) observed as follows that the situation of poor smallholders may even be worsened by contracting given that the agro-industrialisation processes driving it tend to be accompanied by privatisation of land and other natural resources:

Typically this situation has meant a net transfer of productive assets from small farmers and poor rural communities to commercial growers and large-scale corporations, both domestic and multinational. Where customary rights and communal ownership were important, the shift to private property may disadvantage those whose access rights are not

recognized under the new regime. To the extent that these people are more marginalized in a society, there is the risk of widening existing inequalities.

As well as contract farming, other market structures are developing for smallholders to participate in non-traditional commodity production. The type of system will be determined by the commodity type. For example, dairy products are increasingly being produced in Indonesia through farmer cooperatives. Farmers (including smallholders owning one or two cows) own the infrastructure while processors and distributors are responsible for marketing and value-adding. This structure is preferred as the risks are shared among the parties. In the sugar industry, sugar mills may assist smallholders or groups establish crops (as establishment costs are high and crops are not harvested annually) but are loathe to provide a guaranteed market for the crop because of price variability on the world market. Such structures are responses to the existing institutional, political and community characteristics of the stakeholders and the physical characteristics of the commodity.

3. Path dependence and poverty alleviation

The historical tendency for economic development to benefit the rich more than the poor, or fail at least to close the gap between them, was explained by North (1990) in terms of path dependence in institutional change. Although his focus was on differences between nations rather than within them, his explanation applies equally to an intra-national focus. He characterised institutional path dependence as follows: ‘Once a development path is set on a particular course, the network externalities, the learning process of organizations, and the historically-derived subjective modelling of the issues reinforce the course’ (ibid p.99). Network externalities result from actors adapting themselves to the incentives created by an institutional change, so that they come to develop a vested interest in preserving the change. Organisational learning processes reinforce path dependence since choices of where to direct learning efforts are influenced also by the incentives created by the institutional change. In turn, learning choices by actors influence the subjective models – including ideologies – they will use in making subsequent institutional choices. ‘Path dependence means that history matters’ (ibid p.100), therefore, and we should not be surprised when present institutional changes (e.g., multinational corporations contracting with farmers) reduce inherited inequalities less than hoped. Institutional path dependence is a species of what Myrdal (1944) called ‘cumulative causation’. This describes a relationship between an initial change in an independent variable and the dependent variable, whereby the dependent variable then leads to a change in the formerly independent variable in the same direction as the initial movement (Schmid 1999).

North (2005) observed that the gap in standards of living between the developed and undeveloped world became striking only during the last century. The widening of the gap he attributed to institutional frameworks and underlying subjective models in the undeveloped world that held it back from evolving the institutions of impersonal market exchange that enabled the developed world to exploit the potential of new technology. In 1920, per capita GDP averaged across the developed world was 1.97 times the equivalent figure for the undeveloped world. By 1998, the ratio had grown to 6.92 (Maddison 2001).

From the available empirical evidence, Borghesi et al. (2003) concluded that globalisation in the preceding few decades was indeed correlated with greater inequality in world income distribution. They cautioned, however, that correlation does not imply causation. The available evidence (particularly Lindert et al. 2003) was interpreted as suggesting that globalisation has narrowed the income gap between nations that participated in it by liberalising their trade, and widened the gap between these nations and others that remained isolated or excluded from trade liberalisation. They noted the finding of Lindert et al. (ibid) that trade liberalisation in each of China, India, Indonesia and Russia had increased income equality within these nations, and that inequality had increased mainly in rural or hinterland regions isolated from the globalisation process. It was concluded overall that increases in income inequality within and between nations during the decades of globalisation were not caused by globalisation itself but rather by inequality of access to that process.

Institutional path dependence means there is nothing automatic in the evolution of the kinds of institutions, and culture more generally, needed in the developing world to broaden access to globalising markets. As North (2005 p.120) observed, it is naïve to expect such institutions and culture to evolve spontaneously within decades:

The Western world has had a long gestation period to work out the interconnections to make markets work more efficiently ... although still far from ideally. But developing countries face a far more daunting task. To survive and grow in the context of competition from the already developed world, they must deliberately construct an effective price system and supplement it by creating the institutions and organisations to integrate that knowledge at low costs of transacting.

Johnson et al. (2004) argued accordingly that governments and organisations concerned with rural development must be proactive to ensure that the benefits of agro-industrialisation occurring under globalisation are both positive in aggregate and distributed equitably. In addition, the increasingly rapid transformation of agri-food systems in the developing world means that small farmers and agri-enterprises will become further marginalised unless governments and rural development organisations manage to gear them up quickly enough to exploit new market opportunities as they arise (Reardon et al. 2002). These conclusions accord with growing calls for 'pro-poor growth' (Kakwani et al. 2000). However, a major problem in responding to such calls comes from a continuing lack of knowledge about why some poor communities and households benefit from national economic growth while, at the same time, others fall into poverty. As Krishna (2004 p.132) observed:

... growth is the only abiding antidote to poverty. But the long-term may often be too long in coming ... What we need to know better in the meanwhile is the nature of mechanisms that enable growth at the national level to translate into poverty reduction at the household and individual level.

4. Social capital and poverty alleviation

Much of the recent scholarship on this question has focussed on the concept of 'social capital' as holding a vital clue to an answer. Perhaps most influentially, Putnam (1993) defined social

capital as features of social organisations, like trust, norms and interpersonal networks, that improve their efficiency by facilitating coordinated actions. Since the mid 1990s, the concept has found rapid and widespread acceptance in the social sciences, among both practitioners and academics. Within development policy circles, its popularity comes in large part from its apparent identification of a previously overlooked resource to be harnessed for poverty alleviation. In addition, the concept's economic framing has brought opportunities for social scientists to turn the attention of traditionally economics-focussed policy makers in these circles more towards social issues that had been sidelined previously as 'non-economic'.

Although the term 'social capital' has recent origins, the phenomena to which it refers have attracted social scientists' attention for appreciably longer. Whether it adds anything to the analysis such phenomena has been a matter of debate among social scientists. A particular concern has been with its lack of a clear definition. Authors including Robison et al. (2002a), Robison et al. (2002b), Schmid (2002) and Uphoff (2001) highlighted the too common failure to distinguish the causes of social capital from its effects. Uphoff (ibid) was concerned at some analysts' inclusion of cooperation as an element of social capital, arguing that cooperation is an effect of social capital rather than itself part of social capital. The other authors went further in following Woolcock's (1998) recommendation that social capital be defined by its sources not its consequences. They argued that the real source of social capital lies in emotions like sympathy, affinity and caring, which raises the efficiency of collective actions beyond that possible from selfishly-motivated reciprocity.

Despite the continuing lack of consensus on a definition for social capital, Uphoff (2005) recognised that scholarship on this concept remains in its early years, and concluded it would make a useful addition to social science theory provided it is applied more rigorously in the future. He suggested that a more rigorous approach begin with recognising social capital – like we do with physical, financial, human and natural capital – as a particular category of assets rather than as something itself real. The particular assets comprising social capital then must be distinguished from the benefit stream flowing from them, which he specified as mutually-beneficial collective action. For analytical purposes, he argued it is useful to distinguish the assets comprising social capital into two subcategories: cognitive and structural. The assets comprising cognitive social capital are mental states and representations. These include norms, values, attitudes and beliefs that predispose people towards collective action. The assets comprising structural social capital are those that derive from social structure and organisation – such as roles, rules, precedents and procedures – and which facilitate collective action. Uphoff emphasised that the two subcategories are complementary, with most real-world manifestations of social capital containing both.

Indeed, he agreed with the likes of Robison et al. (2002a), Robison et al. (2002b) and Schmid (2002) that structural forms of social capital have their sources in emotional and other cognitive forms. His research into irrigation systems had convinced him that '[w]ithout some degree of 'friendship' among farmers – defined in technical economics as positive interdependence of utility functions – it is hard to see how an irrigation system can be managed with the kind and amount of cooperation and accommodation that is necessary to put available water to its best and most productive use' (Uphoff 2005 p.94). Even so, his efforts to operationalise social capital for measurement had persuaded him that analysis should focus no less on structural forms than on

cognitive forms. Although they come from the same sources, structural forms are more observable since they are expressed in the social realm through inter-personal agreements. Cognitive forms are less observable because they exist in people's minds as thoughts and emotions. Given the resulting added difficulties of analysing cognitive forms, and the fact that the two forms are so interconnected and interdependent, Uphoff argued that it makes sense to account equally for structural forms when the time comes for analysis. A methodology he helped develop that accounts for both forms in analysing the effects of social capital is described and applied empirically in Krishna et al. (1999b) and Krishna (2002).

Considerable efforts have already been made by social scientists to determine empirically whether and how the social capital of rural communities affects their economic and social performance. An early study by Narayan et al. (1999) focused on Tanzanian rural households and found that household expenditure was associated positively with access to social capital. Grootaert (1999) examined how the social capital of rural households, particularly as expressed by their memberships in local associations, affects household welfare and poverty in Indonesia. For low income households, he found that returns to social capital were higher than returns to human capital. The reverse was true for higher income households. Winters et al. (2002) analysed econometrically how the asset positions of rural households in the Mexican *ejido* sector affect their participation in, and returns from, income-earning opportunities. They found that household social capital plays a critical role in these respects, but that the nature of the role can vary according to the type of opportunity and the type of social capital.

5. Common property and competitiveness of the poor

Given the difficulties of the individual smallholders accessing new markets via contracts due to high transaction costs, some scholars have turned their attention to the potential of smallholders acting as a group to achieve the economies of scale needed to reduce these costs to competitive levels. For instance, Thorp et al. (2005 p.907) concluded that 'group formation has great potential to empower and raise the incomes of poor people'. Acceptance by policy makers of such 'common property' institutional arrangements, as a complement to conventional options involving individual and state property rights, has indeed increased markedly since the early 1990s as a literature on such arrangements (Bromley 1992; Gibson et al. 2000; Marshall 2005; McCay et al. 1987; Ostrom 1990) has steadily gained influence. Common property has been defined as shared private property, and a common property arrangement as one in which the relevant property rights and duties are shared among a group of private actors (McKean 2000).

Research to date indicates that local collective action facilitated by common property institutions has some potential to help small operators in the developing world compete in the new food markets emerging from trade liberalisation. For instance, a study of Associative Peasant Businesses in Chile reported by Berdegú (2001) and Reardon et al. (2002) found that this type of local collective action benefited small farmers in markets where transaction costs were high and product differentiation was important. Despite strong government support, however, only about one-fifth of these associations actually helped their members participate in new markets. The failures of the remaining associations were attributed to social capital deficiencies in terms of (i) developing and gaining compliance with rules regarding the rights and duties of individual members, and (ii) forging relationships with market agents and public service providers, as well

as simply in terms of (iii) achieving overall competitiveness. In respect of the last reason, it was found that the scale of even 50-75 associated small farmers, each growing 1-2 hectares of fresh fruit and vegetables, was often not enough to deliver the economies of scale required to satisfy supermarket procurement standards competitively.

The first of the foregoing reasons for the associations failing to help their members access new markets is consistent with the observation by Johnson et al. (2004) that internal relationships are important for the performance and survival of such vehicles for local collective action. They expressed concern that much of the attention on internal relationships by those promoting such collective action has been directed at formalising legally the structures under which it occurs, and recommending particular structures that minimise the legal costs involved, when the available evidence suggests that the best structure for an agri-enterprise group depends on the values and characteristics of its members.

The second of the reasons also accords with a broader conclusion by Johnson et al. (ibid), namely that managing external relationships can be equally important for small rural enterprises as managing production processes in explaining their success in competing for access to new markets. They cited Colombian evidence from Johnson et al. (2002) that a 10 per cent increase in the number of external relationships that an agri-enterprise maintained with other actors was associated with increases in income per worker of up to 18 per cent. The importance of such relationships for exploiting new market opportunities, they argued, arises from the need to know about these opportunities as well as the technological and managerial innovations they might adopt to become and stay competitive. They recommended accordingly that the relevant policy makers enhance their understanding of how such relationships might best be fostered.

6. Connecting the poor to markets

This identified need for governments and other organisations concerned with poverty alleviation to be pro-active in fostering such relationships is consistent with the conclusion of Narayan et al. (2001) that the influence of social capital is most profound in terms of the relationships it facilitates between heterogeneous social units. They observed from the findings of several projects conducted as part of the World Bank's Local Level Institutions Study that without external allies the social capital of poor communities typically remains a poor substitute for the resources and services provided by the state.

The need for policy makers to take a pro-active stance in developing relationships of small farmers and rural enterprises with the wider world was highlighted also by Cleaver (2005). She remarked upon a tendency in development policy circles to oversimplify the social capital concept along the lines of rational-choice reasoning such that attention is diverted from issues of structural constraints on empowerment of the poor, sometimes even resulting in 'victim-blaming' where the poor are viewed as responsible for their own deficits of agency and social capital more generally. She found from her ethnographic research in rural Tanzania that social relationships can constrain as often as they enable, and that the norms and other institutions they embed often serve to reproduce relations of inequality and marginalisation. Thus, 'the poorest people are both more dependent on their ability to exercise agency than others and less able to do so effectively' (ibid p.904). For instance, Blair (2005) found how in rural Bangladesh the poor and poorest rely

on patron-client ties to mitigate their poverty from day to day, but that these ties serve only to reinforce their disadvantage into the longer term.

Along similar lines, Thorp et al. (2005) accepted that the social capital underpinning group formation and maintenance is important for poverty alleviation, but hypothesized that the chronically poor can be disadvantaged in group formation due to their lesser access to agents capable of pushing their interests politically. Thus groups formed successfully among the poor can tend to exclude the even poorer, particularly groups associated with market functions.

These arguments regarding the importance of external agents for allowing rural communities to reap economic advantages – in terms of livelihood stability, employment generation, poverty reduction, and quality of basic services – have been supported econometrically by research into Rajasthani villages by Krishna (2002; 2003). He found that economic development performance was associated most strongly with a combination of high intra-village social capital, on the one hand, and ready access to agents capable of targeting this capital towards incentives arising from the external environment, on the other. The agents found in this setting to be most important in this respect were a new set of young village leaders, relatively more educated and experienced in dealing with government operations and market operations, who had emerged and gained strength in the previous two decades. It was concluded that such agency is critical in situations lacking the kinds of institutions that enable villagers to connect with the state and the market. In such situations, the utility of a given stock of intra-village social capital can be strengthened significantly by investing in the development of agents and other mediating institutions aware of the opportunities available in the market and government programs and able to connect villagers with these opportunities.

The importance of intermediaries for connecting the poor with opportunities arising from economic growth was reinforced by further research in Rajasthani villages by Krishna (2004). The major finding of this research was that diversification of income sources was the most important reason for households in these villages escaping from poverty, and that comparatively few households had diversified their income sources successfully by relying entirely on local resources and markets. It was found that access to diversification opportunities depended critically on households having contacts capable of informing them about, and connecting them with, those opportunities. He criticised governments in India and other developing nations for doing too little to connect poor households with emerging markets, observing that such households ‘rely mostly on kinship-based channels; those who are lucky enough to have relations in cities are the ones most able to diversify and break out of poverty’ (ibid p.130).

Krishna (2003) identified accordingly an important role for rural development programs in helping to foster mediating institutions, including village leaders, with potential to help rural people break free of the economic and cultural constraints on their efforts to escape poverty. He was optimistic in this regard, observing ‘experience shows that agency strength can grow rapidly even within short period of time’ (ibid p.26). This observation echoes an earlier empirical finding of Krishna et al. (1999b) that history does indeed significantly influence a household’s or village’s current stock of social capital, but that by itself it does not do so strongly. Krishna (2003 p.26) cautioned against one-size-fits-all models for such mediating institutions, arguing that such institutions ‘are more likely to succeed if they are folded in with what villagers already

have and what they can hold accountable in terms of local knowledge and everyday understandings of right and wrong’.

7. Lessons from research in Indonesia

As mentioned previously, two of the present authors were involved in research projects in Indonesia that were not focused primarily on social capital but which nevertheless found it to be of potential importance in explaining why some smallholders, as individuals or in groups, were more successful than others in exploiting agro-industrial opportunities. The first project analysed participation in contract farming opportunities by smallholders in East Java, Bali and Lombok (Patrick 2004; Simmons et al. 2005; Winters et al. 2005). The second studied development of community systems of micro-finance delivery in Lombok (Muktasam 2001). In this section, key details of these projects are reprised to add light on the issues discussed above and provide background for the research proposal outlined in the section following.

Three contracts were studied in the first project. The first of these was a hybrid seed corn contract offered to grower groups in East Java by Pioneer, a multinational corporation growing a range of high-value agricultural products in numerous countries. At the time of the research there were 40-50 grower groups participating in the contract each year, representing about 10,000 growers. Contracts were negotiated primarily between Pioneer and the *ketua kelompok tani* (head of grower group). The *kepala desa* (village mayor), other local politicians and government extension officers were also involved to add legitimacy and to be able to serve as ‘umpires’ if a dispute arises. This negotiation resulted in a written agreement, with verbal agreements reached subsequently between the group head and individual growers. Pioneer’s choice of groups to negotiate with was influenced by the distance of each from the company’s processing plant, as well as by groups’ irrigation capabilities and previous histories in growing corn, and by the disease and rodent status of their lands. Since hybrid seed corn can be contaminated through cross-pollination with other corn crops, Pioneer insisted that all corn grown in the geographical area occupied by a grower group be Pioneer hybrid seed corn. Neighbouring grower groups can be potential sources of contamination, so Pioneer sometimes needed to contract with those groups too. Members of a contracted group who did not participate in the contract may have received compensation from Pioneer if they had grown corn previously. Pioneer provided at least one extension officer for each two villages, who provided husbandry advice to growers, monitored crops, and relayed feedback to his or her employer. It is unlikely the same level of extension support would have been supplied by government. Moreover, the contract enabled smallholders to lower their transaction costs of supplying seed corn markets by taking advantage of Pioneer’s existing international marketing network. It also provided smallholders with a credit facility that used their future production as collateral and thereby reduced their borrowing costs.

The second contract was for the growing of seed rice in Bali. The contractor was PT Pertani, a government-owned (but not subsidised) firm based in Jakarta that produces seed in all Indonesian provinces for crops including soybean, corn, rice and peanuts, and also sells fertilizer and pesticides to growers. The number of smallholders in Bali under this contract since 1988 had varied between 200 and 300 annually. Only growers certified as seed rice producers could participate in the contract, with certification undertaken by the government body *Balai*

Pengawasan Sertifikasi Benih (BPSB). Around five per cent of Balinese farmers were certified seed rice producers. Contracted farmers were visited four times during the growing season by BPSB extension officers who provided advice and monitored the crop. PT Pertani negotiated only with the *pekaseh* of an irrigation area (*subak*), who may represent 50 to 60 farmers participating in the contract, over the paddies to be used and the total area to be contracted. The contract was not signed by individual growers, only by the *pekaseh*. Payments for delivery under the contract were made in cash to the *pekaseh* who then distributed the cash between the participating growers. Simmons et al. (2005) identified two advantages of this system for PT Pertani: economies of scale in negotiation since negotiation is required only with a handful of *pekaseh* instead of a few hundred growers; and the *pekaseh* has the local information needed to select those smallholders and land parcels most suited to satisfying the contract. They also identified two main advantages for smallholders: (i) risk management, by virtue of assurance that their product will be purchased at harvest; and (ii) improved access to markets, since the contract provides extension that could overcome barriers associated with lack of information.

The third contract was for producing broiler chickens in Lombok. The contractor was Nusantara Unggasjaya (NUJ), a subsidiary of a Thai multinational corporation which focused on vertically-integrated systems of livestock production. Under contracts with smallholders in Lombok, it was producing about 10,000 broilers daily. There were around 250 smallholders participating in the contract, with about 2,500 birds each, at any time. Each was required to provide Rp. 20 million in capital to enter the contract, and build a chicken coop according to company specifications. They had to follow NUJ's guidelines on input use, with the firm providing extension and advice, day-old chicks, feed, veterinary products and other chemical products on a credit basis. The contract was negotiated directly between the firm and the grower. Contracted growers were not expected to be part of a formal group. They only met as fellow contractees when NUJ's extension officers organised extension activities. Simmons et al. (2005) surmised that these arrangements benefit the firm by allowing it to achieve economies of scale in the provision of inputs and distribution, and to ensure the quality of broilers it requires. They identified three advantages for smallholders as follows: (i) advances of feed and other inputs help them overcome credit constraints; (ii) risk management through diversification into an alternative enterprise; and (iii) the firm provides guidelines for production, which are valuable because the production techniques were new to smallholders and it was unlikely that they could easily access this technical know-how from another source.

Household surveys in relation to each contract were undertaken in this project. Summary results of econometric analysis of the resulting data are shown in Table 1. The analysis supported the hypothesis that participation in the seed corn contract improved participants' returns to capital (as measured by whole farm gross margin), although such support was not forthcoming for the seed rice contract. The hypothesis that the likelihood of participating in the seed corn or seed rice contract increased with farm size (as measured by area of irrigated land) was also supported. It was concluded from these results that although these two contracts did not increase absolute poverty, they did tend to widen income inequality within the relevant farming populations and thus increase relative poverty. In the case of the broiler contract, the analysis suggested not only that participation in the contract increased participants' returns to capital, but also that the likelihood of participating in this contract decreased with the size of the farm. Nevertheless, Patrick (2004 p.64) cautioned here against equating smaller farmers with poorer farmers: 'These

growers [who seek broiler contracts] are certainly not poorer; they just have less access to productive land assets. The introduction of an activity that does not require land but does require capital and a certain amount of risk suits this style of smallholder'. As with the other two contracts, therefore, he concluded that this contract reduced absolute poverty while increasing relative poverty. Although all three contracts reduced absolute poverty, caution is warranted in generalising this finding to all instances of contract farming. While each of the contracts studied was already successful in the sense that it had continued for a number of years, it was also the case that 'in identifying contracts in the field for this study we heard many stories about unsuccessful contracts that lasted only a few seasons before being abandoned. The extent smallholders bore the costs associated with these failures was not clear' (ibid p.68).

Table 1: Three cases of contract farming in Indonesia

<i>Survey Area:</i>	East Java	Bali	Lombok
<i>Contract commodity:</i>	Hybrid seed corn	Seed rice	Broiler chickens
<i>Contract with:</i>	Group	Group	Individual
<i>Significant^a differences between contract participants and non-participants:</i> (+) significant positive association with participation (-) significant negative association	Age of household head (-) Area of irrigated land (+) Value of assets (+) Agricultural group membership (+)	Household head education (-) Area of irrigated land (+) Agricultural group membership (+)	Household head education (+) Area of irrigated land (-) Livestock value (-) Credit constrained (+) Agricultural group membership (-)
<i>Factors significantly^a affecting whole farm gross margin:</i>	Contract participation (+) Area of irrigated land (+) Value of agricultural assets (+)	Household head education (+) Area of irrigated land (+) Value of agricultural assets (+) Livestock value (+)	Contract participation (+) Area of irrigated land (+) Area of dry land owned and operated (-)

Source: Winters et al (2005), Simmons et al (2005).

^a At least statistically significant at the 0.10 level.

One of the hypotheses of the analysis was that the participation of farmers in these contracts is associated positively with their 'community capital'. Stocks of this type of capital were measured using two group membership variables of the kind that Putnam (1993) and others have used in measuring social capital: membership of the head of the household in agricultural groups excluding the contract group; and membership of household members in various village groups. Econometric analysis supported this hypothesis for the seed corn and seed rice contracts when community/social capital was measured by the first of these variables. This finding was to be expected, given that farmers could only participate in these contracts as members of a group, and that farmers demonstrating motivation to participate in agricultural groups generally might be more likely to participate in a new activity organised by such a group. In contrast, the analysis suggested that higher stocks of this capital (as measured by the first of these variables) were

associated with lower participation in the broiler contract. This finding was also to be expected, given that farmers participated in this contract as individuals, and a likelihood that farmers with a revealed preference for group activity might be less motivated to participate in such a contract.

The project highlighted the important role that groups of smallholders can play in reducing the transaction costs of contracting with them individually. This was true at least in cases like the seed corn and seed rice contracts, where contracting with groups delivered significant economies of scale by spreading the costs of negotiating and servicing contracts over multiple smallholders, and also by piggy-backing on existing local capacities for self-regulation. With the seed rice contract, for instance, Patrick (2004 p.67) observed that contracting with a grower group enabled problems with compliance by individual growers to be resolved cost-effectively through traditional dispute resolution procedures: ‘[P]roviding the contract serves collective interests, the group has incentives to deal with contractually errant members’. Given these findings, Patrick (ibid) recommended that the Indonesian Government assist smallholders to organise themselves into groups suited for contracting with corporations, and help the resulting groups negotiate contracts.

In such cases, the project also highlighted the important role of the group head as an agent in linking smallholders with market opportunities. Patrick (ibid) recommended accordingly that the Government continue to improve linkages between group heads and those corporations looking for smallholder groups to contract with. At the same time, it also pointed towards a need to ensure that institutional safeguards are in place to protect against group heads profiting unreasonably from their agency role or favouring some group members unfairly over others. In respect of the seed corn contract, for instance, Winters et al. (2005) urged further research to discern the actual roles played by group heads in these situations. They observed that although the group head in these situations:

... received no explicit compensation from the growers group or Pioneer, he derived considerable authority as sole signatory of the contract and from the financial arrangements. ... The [group head] presumably serves his own interests by trading off the respective interests of contract growers, non-contract growers who are also group members, Pioneer, the broader village constituency and possibly other political interests (ibid p.69)³.

The constraints that path dependence places on participation by the smallest and poorest smallholders in contracting opportunities were also addressed in the project’s conclusions, which noted the tendency of corporations to gravitate towards smallholders, or groups of smallholders, already capable of negotiating and fulfilling contracts competitively. Patrick (2004 p.70) recommended accordingly that government extension activity should continue in this area, particularly in the form of outreach activities that ‘target more smallholders including those not of immediate interest to commercial agribusiness firms because of their small land holdings or poor education’.

³ Patrick (2004) made similar remarks regarding the role of *pekaseh* in linking Balinese growers with contracts offered by PT Pertani.

The second project, concerned with community systems of micro-finance delivery in Lombok, found social-capital-related problems with such systems at both ends of the delivery process. At one end, banks were reticent to lend to community micro-finance groups because they lacked confidence that these groups had the institutions and other elements of social capital in place that were needed to ensure repayment. At the smallholder level, many of the groups lacked the mutual trust and sense of community they needed to ensure that most members made their repayments. For instance, a common excuse made by group members was ‘why should I repay the credit when others did not?’ (Muktasam 2001 p.5). One reason for this second problem was that the micro-finance groups had generally been formed anew for the specific purpose of accessing finance, rather than grafted onto existing groups with richer stocks of social capital to draw upon. A linked reason related to some smallholders ‘negative perceptions towards credit as a ‘gift from the government’’ (ibid. p5). This reason echoes Schmid’s (2000 p.165) arguments that affinity is a key element of social capital, particularly his observation of how paternalistic assistance to communities projects often offends local people so they become less prepared to cooperate with the conditions attached to the assistance:

When a grant or gift is from a loved one, it is often given special care. When the grant is from someone whom you hold in little regard or even contempt, it is ignored and ill treated even if it is otherwise valuable.

This project concluded that design of community systems of micro-finance delivery in Lombok needed to pay greater attention to the use of effective community groups, particularly by meeting criteria including: small group size, effective leadership, homogeneity of membership, participatory group formation and operation, cohesive internal relationships and effective rules (Muktasam 2002), as well as accommodation of local power and value issues (Muktasam 2001). This conclusion was confirmed during a scoping visit by Patrick, Muktasam and others to Bali to identify reasons for the greater success of the community systems of micro-finance delivery there compared with the systems in Lombok. It seemed a major reason lie in the fact that community delivery in Bali was through the *desa adat* (traditional village) institutions and *awig awig* (traditional rules or norms) which retain a strong influence on actual behaviour, including in encouraging and enforcing loan repayments. In contrast, this community strength was not so evident in Lombok.

8. Connecting smallholders with emerging markets: A research proposal

The research proposal outlined below has been designed to build on the knowledge gained in the two projects reviewed in the previous section, particularly by looking more deeply into some of the social capital issues raised by those projects. The aim of the proposed project is to evaluate the role that social capital plays in Bali and Lombok in alleviating rural poverty by helping smallholders to exploit market opportunities arising from trade liberalisation. A particular focus of the project would be on understanding the conditions under which social capital in the form of common property institutions helps smallholders access such opportunities.

The choice of the adjoining islands of Bali (an individual province) and Lombok (in the province of Nusa Tenggara Barat, NTB) as the proposed cases for study is explained on the one hand by their cultural similarities. Previous research into social capital highlights the challenges involved

in measuring its availability in specific contexts, comparing availability across different contexts, and extrapolating findings from one context to another in respect of how social capital relates to economic and other performance variables of interest. Hence, attempts to develop ‘grand theories [about social capital] spanning countries and continents’ may be misguided, and ‘a middle level of analysis’ that limits comparisons to social units ‘that are culturally not too dissimilar’ may be more fruitful (Krishna et al. 1999a p.7). On the other hand, the choice of these two cases is explained by their cultural contrasts, particularly in respect of the strength of their traditional common property arrangements. The cases also differ to some extent in terms of their agricultural systems. Such contrasts between cases facilitate an examination of how they have contributed to their performance differences (e.g., in terms of smallholders’ access to emerging market opportunities).

As explained previously, common property arrangements have potential in some circumstances to help smallholders forge links with new market opportunities and the government programs intended to facilitate those links. This has certainly been the case in Bali where government credit and livestock distribution systems have worked through the *subaks* with substantial success. However, there are indications that the *subaks* are under increasing pressure from external and internal sources (Windia 2005). The tourism sector in Bali is providing off-farm employment opportunities for the younger family members who are becoming less dependent on their community and more dependent on off-farm income. Likewise, the increasing returns from tourism is increasing land values and encouraging conversion of *subak* land to tourism development. The breakdown in the *subak* system is having a negative impact on social stability, the environment and agricultural production in Bali (Sutawan 2005).

While irrigated land is being diverted from agriculture (1.5 per cent per year), the growing number of tourists is increasing the demand for a large range of new commodity types. While the Balinese economy now depends strongly on tourism, this sector has been susceptible to international shocks (e.g., SARS, cholera, and terrorist attacks in 2002 and 2005) leading to substantial short-term unemployment and poverty. During these times the agricultural sector plays a significant role as a ‘safety’ sector as the unemployed return to their villages (ibid). The terrorist attacks in particular have led to calls to pay greater attention to the interdependence of the island’s tourist and agricultural sectors (e.g., Robinson et al. 2005).

There are similar issues in Lombok, although there is evidence that the breakdown in traditional common property arrangements is greater than in Bali and having a more significant effect on development (Muktasam 2005). The community support system of *gotong royong* (communities working together to construct public facilities like irrigation channels) is perceived to be not as strong as it was in the past and there is a decreasing respect for traditional structures of local community leadership. There have been and are many government (provincial and national) programs being implemented that aim to increase smallholder income. However, most of these programs have failed to realise the expected benefits. Many smallholders in Lombok now regard government as simply a source of free credit and grant money with no ensuing responsibility to repay or develop sustainable systems (Muktasam 2001).

The first objective of the proposed project is to understand the nature of, and differences between, relationships between smallholder communities and agribusiness in Bali and Lombok.

Achieving this objective would involve project team consultation to confirm project objectives and plan initial key informant interviews to scope the range, nature and benefits of agribusiness relationships/opportunities with agricultural communities in Bali and Lombok. It would also entail an initial round of semi-structured interviews of key informants in Bali and Lombok – including representatives of agricultural communities, private agribusiness, public agribusiness, and NGOs.

The second objective is to identify the roles of social capital in developing mutually-beneficial linkages between smallholders and agribusiness in Bali and Lombok. Activity under this objective would begin with modelling conceptually how social capital interacts with other factors to affect performance by agricultural communities in linking with agribusiness opportunities. A key starting point will be the model that Krishna's (2002) econometric analysis found best accounts for relationships between the social capital of Rajasthani villages and their economic development performance. This model was derived in turn from the conceptualisation of social capital presented by Krishna et al. (1999b) and Uphoff (2005). The next step would be to appraise how the conceptual model translates to the contexts of selected rural communities. These communities would be a subset of the full sample of 60 from which data for model estimation would be collected (see below). The appraisal will collect qualitative and quantitative data for each community via interviews with households and community leaders. This activity will result in finalisation of the model to be estimated, and the interview schedules by which the requisite data are to be collected.

Data for model estimation would then be collected by structured face-to-face interviews across a stratified random sample of 60 agricultural communities (30 each in Bali and Lombok). For each community, measure model variables by integrating data from interviews with individuals, leaders and focus groups from that community. Model estimation would then proceed by applying appropriate econometric procedures.

Meanwhile, semi-structured interviews with key agribusiness stakeholders would be undertaken to elicit the criteria they apply in selecting communities and/or smallholders to work with. The criteria elicited will (a) provide additional evidence with which to validate the model, (b) help communities better target their efforts in attracting agribusiness partners, and (c) assist governments, NGOs, etc. develop programs/policies to better link smallholders with new market opportunities.

The third objective is to assist the development of linkages between smallholders and agribusiness that enhance smallholder welfare. Focus groups would be established to identify implications of research findings for rural development policy and practice in Bali and Lombok, and develop a draft strategy for communicating these implications. The outcomes of these discussions would be used to assist government and NGOs develop policy frameworks for linking smallholders in Bali and Lombok with agricultural development opportunities.

9. Closing comments

Earlier convictions that economic growth arising from international trade liberalisation would alleviate poverty almost automatically are yielding to widening acceptance of institutional path

dependence and its implication that new trade opportunities often entail high transaction costs for smallholders that they cannot themselves reduce to affordable levels. For instance, the World Bank (2005 pp.7, 8-9) recently called for greater emphasis on achieving equitable distribution of the opportunities from globalisation, since ‘with imperfect markets, inequalities in power and wealth translate into unequal opportunities ...’ and ‘unequal power leads to the formation of institutions that perpetuate inequalities in power, status and wealth’.

The need to reserve a substantial share of this emphasis for redressing imbalances in the social capital assets required to connect with, and compete in, emerging markets is evident from the arguments and evidence reviewed in this paper. Indeed, the evidence suggests that strategic investments designed to add to smallholders’ endowments of such assets can be an effective way of raising their incomes. The paper indicates also that a significant further share of this emphasis should be reserved for learning about the social capital assets already available to smallholders and finding ways of building on these assets to help smallholders compete in new markets. Such a focus has been missing too often in the past due to policy-makers’ preoccupation with privatising property rights to strengthen incentives for market participation, and their associated blindness to what adaptation of customary (and more contemporary) common property arrangements might contribute towards smallholders’ market competitiveness. This blindness has been doubly damaging to the cause of poverty alleviation when it has resulted in privatisation processes failing to acknowledge smallholders’ common property rights in natural resources and thus denying them adequate compensation for transfers of those rights away from them.

Nevertheless, much remains to be learnt about how the social capital needed to alleviate poverty among smallholders might best be harnessed and strengthened. We hope the research proposed towards the close of this paper helps with some answers.

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