Routledge
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Canadian Journal of Development Studies / Revue canadienne d'études du développement

ISSN: (Print) (Online) Journal homepage: https://www.tandfonline.com/loi/rcjd20

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To cite this article: Bina Agarwal (2020) A tale of two experiments: institutional innovations in women's group farming in India, Canadian Journal of Development Studies / Revue canadienne d'études du développement, 41:2, 169-192, DOI: 10.1080/02255189.2020.1779673

To link to this article: https://doi.org/10.1080/02255189.2020.1779673

Published online: 07 Aug 2020.

CANADIAN JOURNAL OF DEVELOPMENT STUDIES
REVUE CANADIENNE D'ÉTUDES DU DÉVELOPPEMENT
2020, VOL. 41, NO. 2, 169–192
https://doi.org/10.1080/02255189.2020.1779673

A tale of two experiments: institutional innovations in women's group farming in India

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ABSTRACT

This article traces the factors that shaped an unusual institutional innovation – group farming by women – in two states of India, Telangana and Kerala. Based on historical material and interviews with those who initiated or implemented these experiments, the article examines how group farming for women's economic empowerment emerged as a significant development programme in the 2000s, and its divergence from the previous four "waves" of collective farming globally. Also, noting the substantial differences between the two states in programme implementation, such as in the governance structures, the size and social composition of groups, methods of scaling up, and forms of state support, the article asks and addresses the following questions: what explains these differences? In particular, what was the thinking behind them? And how did the differences impinge on group performance and the potential for replication?

RESUME

Cet article retrace les facteurs ayant façonné une innovation institutionnelle remarquable – l'agriculture de groupe féminine – dans deux États de l'Inde, le Telangana et le Kerala. Appuyé sur des données historiques et des interviews de personnes à l'origine ou ayant mis en œuvre ces expériences, l'article montre comment l'agriculture de groupe s'est affirmé comme programme d'autonomisation économique des femmes durant les années 2000, et comment cette agriculture se distingue des quatre précédentes « vagues » mondiales d'agriculture collective. En outre, ayant remarqué des différences substantielles de mise en œuvre du programme entre les deux États, par exemple en termes de structures de gouvernance, de taille et composition des groupes, de procédés d'expansion, ou encore de formes de soutien de l'État, l'article s'attache à répondre aux questions suivantes: Comment expliquer ces différences? Sur quelles logiques s'appuient-elles? Comment influencent-elles la performance des groupes et leur potentiel de reproduction?

ARTICLE HISTORY
Received 4 March 2020
Accepted 26 April 2020

KEYWORDS
Institutional innovations; collectives; women's group farming; *Kudumbashree*; India

1. Introduction

In the early 2000s, two states of India, Kerala and Telangana, became the locus of an unusual institutional innovation – women's group farming. In Kerala, the experiment

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was initiated by the state government under its *Kudumbashree* programme for poverty eradication. In Telangana, the central government and the United Nations Development Programme (UNDP), India, jointly started the experiment, vesting responsibility for implementing it in a quasi-non-governmental organisation (NGO) – *the Andhra Pradesh Mahila Samatha Society* (APMSS). Both experiments aimed at empowering poor women economically by providing them securer livelihoods.

These programmes departed radically from conventional approaches to rural women's empowerment, not only by focusing on farming, but also by shifting away from the usual preoccupation with individual family farming managed by male household heads, to group farms run entirely by women. This was a surprising shift, considering the prevailing scepticism about collective farming arising from adverse perceptions about socialist collectivisation, as well as India's failed experiments with joint cultivation in the 1950s and 1960s. What explains the shift?

Moreover, while the two states converged in terms of promoting all-women group farms, they diverged substantially in the institutional structures through which the programmes were implemented, the size and composition of the groups, their formalisation and autonomy, the nature of scaling up, and the forms and extent of state support and commitment. What explains these differences, and how did they impinge on the economic performance of the groups and their replicability?

This article addresses both issues. First, on the shift in approach, the article traces the antecedents of collective farming and its controversial history, and argues that the experiments in the 2000s stemmed from a very different origin to earlier attempts at group farming globally. They stemmed, particularly, from India's success with women's self-help groups and associations. Second, the article shows that underlying the divergence in implementation between the two programmes were key differences in leadership and thinking about the form groups should take (their social composition, size, etc.), the organisational structure that was needed to give the groups autonomy and negotiating power, and the mechanisms for involving village women in participatory planning. Impinging on these factors were also differences in the effectiveness of decentralised state governance in the two states. No previous study has addressed these issues.

The article is divided into seven sections. Section two, which follows, provides a brief history of group farming globally. Section three outlines the ideas that led to the promotion of group farming in the two states, while sections four and five trace the differences in the organisational structures that the states set in place for programme implementation, and the ideas that shaped those structures and group composition. These three sections (3–5) are based on my in-depth interviews conducted over 2014–2016 with the key persons involved in shaping or implementing group farming in Telangana and Kerala (see Appendix), supplemented, where possible, by an analysis of available reports and documents. Section six summarises my published results on the economic performance of women's group farms, based on my primary survey conducted in 2012–2014 for 763 farm enterprises in three districts of Telangana,[1] and 250 farm enterprises in two districts of Kerala. This section also highlights how differences between the states in programme conceptualisation and implementation impinged on that performance, and on women's social and political empowerment. Finally, the concluding section reflects on the two experiments and the lessons they hold for replication elsewhere.

2. The idea of group farming: history and perceptions

The idea of group farming is not new. Historically, we can identify at least five "waves" of group farming, with diverse origins, trajectories and features (Table 1).[2]

The first and best-known wave is that of socialist collectivisation, especially as undertaken in the former USSR, Eastern Europe and China. The key features of these collective farms – created by the forced pooling of peasant land by the state – was their non-voluntary nature; very large size, often involving thousands of hectares and farmers; centralised decision-making, with farmers having little voice; and compulsory deliveries of grain to the State. In time, it came to be widely recognised that the effects of this massive collectivisation were highly detrimental to human welfare and agricultural productivity, especially in the USSR,[3] and to a lesser degree in Eastern Europe which shifted its course early by abolishing compulsory deliveries and allowing households to keep small plots (Swain 1985; Berend 1990; and Lordachi and Bauerkämper 2014). In China, the effects varied regionally, depending on community ties, and ecological and demographic conditions (Li 2018).

In the 1960s and 1970s, however, the adverse effects of forced collectivisation were yet to be recognised, and there was a second wave of collective farming attempted in many non-socialist, post-colonial countries of Latin America, Africa, Asia (including India) and the Middle East.[4] Typically undertaken as part of agrarian reform, and often influenced by ongoing programmes in socialist countries, some collectives covered a few farms while others encompassed entire villages (Agarwal 2010a). Although forming

Table 1. Global waves of group farming: From forced collectivisation to voluntary cooperation.

Waves	Motivation	Period of initiation	Countries	Type
First wave	Socialism	1920s	USSR (whole country)	Top-down, coercive, vast collective farms, non-participative
		1940–1950s	Eastern Europe, China (whole countries, but regional variations)	Top-down, coercive, large collective farms, non-participative
Second wave	Non-socialist, agrarian reform	1950s, 1960s	Asia, Africa, Latin America, and the Middle East (some countries)	Semi-voluntary to coercive, ranging from small group farms to entire villages
Third wave	Non-socialist, community led	1960s, 1970s	France (many regions) Norway (some regions)	Voluntary, medium sized group farms
Fourth wave	Post-socialist, decollectivisation	1990s	Russia, Eastern Europe, Central Asia	Voluntary, small to medium sized group farms
Fifth wave	Empowering small farmers	Late-1980s	Andhra Pradesh: Deccan Development Society (a few villages) Kerala: GALASA (a few villages).	Voluntary, small group farms
	Empowering disadvantaged women	Late-1990s, 2000s ongoing	Telangana region of Andhra Pradesh (some districts): APMSS Kerala: *Kudumbashree* (the whole state)	Voluntary, small group farms
	Empowering marginal farmers	2015 onwards	Nepal, North Bihar, West Bengal	Voluntary, small group farms

collectives was ostensibly voluntary, in practice the State frequently applied pressure, and the typically large farm size and embedded socio-economic inequality within the group made participative decision-making difficult. In contrast, groups formed among acquaintances with minimal social differentiation, worked better (Borda 1971; Ruben and Lerman 2005). Overall, however, few of these experiments survived.

In newly independent India, there was considerable political support for cooperatives (Frankel 1978), and in 1946, the Cooperative Planning Committee recommended the promotion of joint cultivation, influenced especially by Chinese policies (Ganguli 1953), as well as the formation of service cooperatives such as for credit, input purchase, and machine use (Goyal 1966).[5] However, large landowners and significant political leaders resisted joint cultivation (Singh 1959), and efforts to bring together large and small farmers into one cooperative had understandably little success. In time, most states shelved the idea (Frankel 1978).[6] Marketing and credit cooperatives continued, however, and new ones emerged (Baviskar 1980; Mascarenhas 1988), but these did not involve joint production.

While both the first and second waves of group farming – created largely by top-down State interventions – failed, the third and fourth waves, based on voluntarism, were largely successful, as in democratic Europe (especially France)[7] and post-socialist countries. Under socialist de-collectivisation, for instance, the plots restored to members of former collectives were typically too small for economic viability. Hence, in countries as diverse as Kyrgyzstan, Romania and East Germany, recipients voluntarily pooled their plots with those of family members or neighbours to create larger units and invest in capital equipment. These group farms were found to be more productive than individual family farms.[8]

The fifth wave, however, took time to emerge. Given the disappointing outcomes of their 1950s–1960s experiments, planners and researchers in many developing countries came to see group farming as non-viable. This cloud of failure was not dispelled by the success of group farms in Europe or in the post-socialist transition economies, since rather little was known about them globally. What then explains the emergence of group farms on a notable scale in two states of India in the 2000s, and the departure from the standard male-headed groups to women-only groups in this fifth wave?

The answer lies in the considerable change that had occurred in our understanding of how collective action works by the early 2000s, when Telangana and Kerala launched their experiments. By then, substantial ground experience had been garnered in promoting collective institutions, especially in micro-finance and in governing common pool resources (Ostrom 1990). Among social scientists (especially economists) also, there was a growing recognition that cooperation could be built on trust and reciprocity among prior acquaintances (Baland and Platteau 1996; Agarwal 2010b). And a considerable consensus had emerged among development practitioners that group formation empowers the poor.

In India, the most important developments were the success of three types of groups:

(a) Microcredit groups, particularly Self-Help groups (SHGs) formed by 10–20 self-selected persons of similar socio-economic backgrounds, who pooled savings and rotated lending among members. In the mid-2000s, there were 2.6 million SHGs in India, of which 80–90 per cent consisted entirely of women (Tankha 2012, 37, 2).

Many NGOs also saw SHGs as entry points to women's empowerment (National Council for Applied Economic Research (NCAER) 2008).

(b) Community groups governing common pool resources, such as forests and water bodies. For instance, in 1990, the Indian government launched the Joint Forest Management Programme. By 2001, India had 84,000 community forestry groups. This significantly improved forest condition, with women's participation in governance further enhancing conservation outcomes (Agarwal 2010b).

(c) Groups delivering social programmes, such as for health and adult education. Of these, the government-initiated programme, *Mahila Samakhya* (2014), or education for women's empowerment, is an important example, on which Telangana's group farms were later based.

The success of groups formed across diverse contexts made the group approach to programme delivery widely acceptable. However, it did not automatically lead to *group farming*, which needed the pooling of private resources, mutual trust, and an equitable sharing of work, costs, and benefits among those cooperating. Hence, while prior experience in group functioning provided better ground for promoting joint cultivation in the 2000s than it did in the 1960s, group farming – which needs fully integrated cooperation – was still something of a leap in the dark.

3. Group farming in India today: origins

When Telangana and Kerala launched group farming, there was widespread acceptance within development policy and practice that development programmes needed to focus not only on disadvantaged *households* to improve human well-being, but also on *women's* empowerment and gender parity. This recognition began in the 1970s and spread transnationally through women's movements, civil society groups, academics, and international agencies, especially the United Nations. Similarly, there was a focus on poverty alleviation and basic needs, with an expanding definition of poverty to include multidimensional measures.

Another paradigmatic shift related to the *process* of policy formulation, away from top-down expert-driven planning and towards participatory planning in interaction with local communities. The idea of decentralised governance was also becoming popular. Although, in India, this was initiated soon after independence from colonial rule in 1947, decentralisation became more firmly embedded after India's 1992/93 constitutional amendments. These devolved greater financial powers to village councils and reserved one-third seats for women in the *Panchayati Raj Institutions* (PRIs) – India's three-tiered system of local self-government at the village, block and district levels. (The term *panchayat* is used here to mean village council, which can sometimes cover several villages.)

In addition, there was the noted increasing openness to using a group approach for programme delivery; a growing recognition within economic theory that collective action was possible under conducive conditions; and efforts at scaling up micro-initiatives by creating federations that connected individual groups. These ideational and institutional changes, in turn, informed the group farming programmes.

The Telangana programme

In the Telangana region of undivided Andhra Pradesh, the group farming project – termed *Samatha Dharani* – was initiated jointly by the UNDP and the Government of India (UNDP-GoI) in 2001, with guaranteed support for five years. The initiative was conceptualised as a "project", without a detailed plan or state commitment on how it might continue after the project period. It was implemented in five districts of what is now Telangana state through APMSS, which was established in 1993 to empower women via education under the GoI's *Mahila Samakhya* programme. For this purpose, APMSS created *sanghas* or women's collectives (one per village) in the districts where it worked. The village *sanghas* were then constituted into federations, scaled up to the district level (Jandhyala 2012). The all-women *sanghas* were composed of poor women belonging mostly to the socially disadvantaged Scheduled Castes (SCs). Group farming was built on this pre-existing *sangha* structure to form *Samatha Dharani* groups (SDGs).

Although there is little written on the ideas underlying the launch of this group farming project, my interviews with those involved in its initiation provide a picture. The ideas emerged from several channels: prior examples of group farming in the region, small experiments by village women themselves, activist experience, academic research pointers, and UNDP's and APMSS's interest in focusing on agriculture, the sector where the majority of rural women workers are based. These channels are described below.

First, APMSS's senior staff was familiar with an important (if geographically limited) early experiment with women's group farming in the 1980s, undertaken by an NGO, the Deccan Development Society (DDS), which was working in Telangana's Medak district. Initially, DDS worked only with male farmers, but when village women challenged the NGO workers asking – "Why don't you work with women?" – there was a shift (personal communication, P.V. Satheesh, Director, DDS). Over time, DDS moved entirely to groups of poor, low-caste women, who began to cultivate by leasing in land in groups of five to 15 and sharing labour, inputs, and outputs equitably (Agarwal 2003). Some women also took advantage of the state government's subsidised credit-cum-grant scheme under which low-caste women could purchase land in groups. They divided the land individually in terms of ownership, but farmed it collectively. Knowledge of this prior experience influenced APMSS.

> I was very familiar with DDS and some of our field staff had earlier worked in DDS … We invited someone from DDS to tell us about women's land leasing efforts. This was the seed, and from 1996 onwards several ideas were afloat, and there was good cross fertilisation (Author's interview with Kameshwari Jandhyala, former Project Director, APMSS, 11 November 2014).

Second, in the early 1990s, some women's *sanghas* in Medak district leased in land to undertake group farming themselves, outside the purview of DDS, although probably influenced by its experience. However, these groups remained few in number, until the UNDP project was launched (Kameshwari Jandhyala and P. Prasanthi, author's interviews).

Third, there appears to have been some impact of a discussion in my book (Agarwal 1994) on the need to promote women's group farming, given the large and increasing numbers of women dependent on agriculture for a livelihood. I had also shared these

ideas in several public forums and with key individuals within the UNDP and the government's agricultural extension department in Delhi.[9]

Fourth, a crucial bridging role, linking the UNDP and APMSS, was played by the UNDP staff, especially Kalyani Menon-Sen (then gender advisor to UNDP, India) and Neera Burra (then Assistant Resident Representative, UNDP, India). Menon-Sen was also an Executive Committee member of *Mahila Samakhya* for Uttar Pradesh state and participated in the national debates on what *Mahila Samakhya* should be doing for rural livelihoods. She was thus a key person when APMSS discussed the group farming project with the UNDP in 1998–1999 (see also Burra 2004). Others who worked on food security in Andhra Pradesh were also part of project conceptualisation. As Kameshwari Jandhyala put it: "So you see, there was a history. *Samata Dharani* did not arrive suddenly out of the blue". (Author's interview in Hyderabad on 11 November 2014).

At least in Telangana, therefore, group farming did not evolve from socialist ideas, nor were such ideas evoked by those who conceptualised the project within the UNDP and the GoI, or by those implementing the project locally. Rather, economic activity was built onto the *sangha* structure, created earlier for women's social empowerment. This helped in so far as the women who took up group farming already knew each other, but building the programme on pre-existing *sanghas* also meant that features such as large group size and shared socio-economic disadvantage were not vetted to see if they were conducive to a collective *economic* enterprise. As P. Prasanthi (then Project Director, APMSS) noted: "The SHG model was good for economic programmes, but we were focusing on social empowerment, so numbers mattered". (Author's interview in Hyderabad on 30 July 2014).

The Kerala programme

Kerala's group farming experiment also began in the 2000s, but unlike in the case of Telangana, many of those who initiated it *were* influenced by left-wing socialist ideology, although they did not promote large collective farms. During 1987–1989, under the Left Democratic Front (LDF) government led by the Communist Party of India (Marxist), for instance, Kerala tried group farming in 25 villages in what was called the GALASA experiment (Group Approach for Locally Adapted and Sustainable Agriculture), as a follow-up to the state's land reform programme (Franke 1993; Devi 2006). Under it, farmers pooled land and cultivated jointly, but kept ownership rights to their plots. The groups saved on labour (Devi 2006), and their yields were estimated to be 30 per cent higher than before (Heller 1999, 146). However, the experiment petered out under the new coalition government. Hence, this early attempt was vulnerable to political change, unlike the current initiative of group farming that has survived several changes in government, not least due to its innovative organisational structure, discussed later.

Kerala's policy shifts evolved in two stages: first, *Kudumbashree* – the Kerala State Poverty Eradication Mission – was established by the state government in 1998; and second, group farming was adopted as a key component of poverty alleviation and rural women's empowerment. *Kudumbashree* was based on ideas emerging from three types of initiatives in the early 1990s: (i) a poverty reduction programme in the rural areas of Mallapuram (then Kerala's most backward district), which identified the poor

through a nine-point multidimensional poverty index;[10] (ii) an urban poverty alleviation and community based nutrition programme, launched by UNICEF in Alappuzha district for improving health and sanitation among women and children, for which neighbourhood groups were constituted to promote community participation; and (iii) the People's Plan Campaign through which the LDF government sought to involve people in the planning process – "Planning Up".[11] Moreover, 10 per cent of the *panchayat* budget was designated for women's programmes. In other words, the idea of participative planning and women's inclusion were key elements of policy formulation.

The group farming initiative was thus based on an interlocking grid of ideas: decentralised management and decision-making with community participation; a multidimensional definition of poverty; mobilisation of grassroots thinking by the People's Plan Campaign; and a budgetary allocation in *panchayats* for a women's component plan. In addition, there was a growing interest in reviving agriculture and scaling up. These ideas were implemented through three parallel but interactive pillars of governance (detailed in section four), one representing the *Kudumbashree* Mission (henceforth called the K. Mission), the second representing the community, and the third the local government. A special Task Force of three senior government officials played a key role here, as discussed later.

This organisational framework allowed ideas to permeate from below in the early years of the K. Mission. Examples of poor women farming collectively by jointly leasing land began to surface from some districts. Several village women also requested permission to cultivate fallow land. These demands fell on fertile ground, since those preparing the women's component plan were looking for viable economic activities for poor women.

> For the women's component plan we were looking for ways of enhancing women's livelihoods. We consulted the *panchayats*, but there was no clarity on what constituted 'women's projects'. Then grassroots stories of some women doing group farming showed a way forward (Author's interview with Sarada Muralidharan, former Executive Director of the K. Mission, on 14 February 2015).

S. M. Vijayananda (former Secretary, Local Self-Government, Government of Kerala) elaborates:

> Kerala had a lot of land lying fallow … . and hiring labour was costly. The better-off who owned land did not think it was worthwhile cultivating it. Extremely poor women saw an opportunity here to cultivate the fallow land and approached the *panchayat* for help in acquiring it. They knew how to cultivate. They just needed help. They spontaneously set up informal farming groups (Author's telephonic interview with Vijayananda on 11 March 2016).

These early examples of informal group farming through land leasing took more formal shape in 2010, when they began to be linked with credit under the Joint Liability Group (JLG) scheme of the National Bank for Agriculture and Rural Development (NABARD).

The participatory process of programme conceptualisation and implementation thus demonstrated an openness to learning from ground experimentation and ideas coming from village women, in contrast to the expert-driven process that typically shapes development programmes.

State and civil society as actors

In both states, civil society and the government played important roles in programme formulation, but the nature, extent and continuity of State support received by Telangana's SDGs and Kerala's JLGs is a study in contrasts. And although both states promoted similar models of women leasing in land while also working on their family farms (if any), their organisational structures and implementation diverged widely.

At its height, the Telangana programme had 500 SDGs across five districts. Official support came essentially from the central government, while the state government's support was limited and inadequate. Each SDG received a seed grant of Rs. 35,000,[12] technical training in farming practices, and agricultural implements (some specially designed to suit women's needs), during the project's heyday. In addition, APMSS received funds to train women in accounting and financial management, although, since most lacked even basic literacy, these additional skills could be acquired effectively only by a limited number. The women were also taught organic farming through the state agricultural department, and taken on "exposure visits" to other states to learn from farmers there (P. Prasanthi, author's interview; APMSS 2005). In some cases, crop demonstrations were organised in the women's fields.

In *effective* terms, however, the technical inputs and training provided by the state agricultural department were limited and lacked continuity. The SDGs were helped mainly by agricultural experts hired privately through the UNDP funds, rather than by government officials (P. Prasanthi, author's interview). As Menon-Sen (2012, 160) elaborated.

> Ultimately APMSS hired women agricultural graduates. While the performance of these women was outstanding … their presence cut off the possibilities of sensitising mainstream extension workers to the needs and priorities of women farmers. In the words of one such resource person, 'the seed of collaboration did not germinate at all'.

Despite setbacks, the SDGs continued to farm, overseen by the *sangha* federations and APMSS under its *Mahila Samatha*[13] programme. However in 2016, even the latter programme was dissolved, and the future of the SDGs remains uncertain.

In Kerala, state support was built into the programme through the K. Mission on a sustained basis. First, the JLG's were linked to subsidised credit via NABARD.[14] (This was an all-India scheme, which the Telangana groups did not take advantage of.) Second, instead of giving them outright subsidies, an incentive system was instituted, with area incentives based on area cultivated and production incentives based on crop yields. Third, Kerala created Community Development Societies at the *panchayat* level (as detailed further below), which received Rs. 50,000 to buy farm equipment for setting up farmer facilitation centres for the benefit of the JLGs. Fourth, women farmers were trained through agricultural universities in the technical aspects of farming, such as how to use machines, prepare organic pesticides, and grow new fruits and vegetables. Some JLG members were also trained as Master Farmers to respond to JLG needs. Fifth, during 2006–2011, district-level meetings were held to discuss with the women what crops they would like to grow, and how they could specialise in niche crops such as pineapple and *kadukki* banana. As Ms. T.S. Seema explained:

> When we started, many of the women had been agricultural workers, not farmers, and they lacked adequate knowledge of farming and farm management. Apart from *Kudumbashree's*

training, older women farmers in the community (60-80 years of age) taught the younger ones (Author's interview on 11 August 2015 with T.S. Seema, who was active in Kerala's State Planning Board during *Kudumbashree*'s initiation).

Moreover, most of Kerala's JLG members were educated. This helped them absorb technical information better than Telangana's SDG members, most of whom were uneducated.

JLGs were also free to choose their crops according to market demand and profitability. In Telangana, however, APMSS sought to promote food security by asking SDGs to focus primarily on foodgrains. This reduced women's crop options, and in some cases it created tensions between APMSS and the SDGs who said they would have preferred to grow cotton if allowed to, given dryland farming conditions (Agarwal 2014).

4. Organisational structure for governance

Perhaps the most important difference between the Telangana and Kerala initiatives was in the ideas that shaped their organisational structures, despite some broad commonalities. The commonalities between the two states lay in the mix of top-down and bottom-up leadership, and the substantial space given to village women themselves for programme development, even though the initial guidance came from the programme initiators. However, the differences were also notable.

Telangana

In Telangana, APMSS used the pre-existing *sanghas* from the *Mahila Samatha* programme to launch group farming, selecting villages with cohesive *sanghas* that had been functioning for many years. All *sangha* members could join the SDG in their village (each village had one). The village level *sanghas* were represented in federations which were scaled up to the district level. These federations supported the SDG programme, but the latter also absorbed the weaknesses of the pre-existing *sangha* structure. On its part, the UNDP-GoI project sought to mobilise local government support and technical help from the state agricultural department, but the latter's commitment to the project was neither automatic nor structurally assured.

In fact, there were tensions in the sharing of the UNDP funds between APMSS and the Andhra Pradesh agricultural department. For example, Kalyani Menon-Sen observed: "The department questioned why the women (rather than the Department) were receiving most of the UNDP funds as well as the limelight" (author's interview on 17 August 2016). Nandini Prasad (former Project Director of APMSS 1999–2003) added: "We had a tough time. The state government saw it as an NGO programme, not as a government programme". Moreover, once the UNDP funding ended in 2005, even the limited state support ceased.

Kerala

In contrast, Kerala's programme enjoyed substantial state commitment. Also, here the group farming project was implemented through an organisational structure which rested on three pillars. These pillars supported all forms of economic group enterprises under *Kudumbashree*, but became the backbone of group farming.

The first pillar was the K. Mission, created in 1998 at the district and state levels to eradicate poverty through various economic enterprises, of which group farming was an important one. Government officials from relevant ministries were seconded to the Mission. The second and most important pillar was the *Kudumbashree* community network (or K. Network). This was composed of neighbourhood groups (NHGs) at the village level, Area Development Societies (ADS) at the ward level, and Community Development Societies (CDS) at the *panchayat* level. Representatives from the NHGs were to be elected to the ADS, and representatives from the ADS were to be elected to the CDS. The third pillar was local self-government (the PRIs), whose members are elected through state-held elections, as elsewhere in India.

Each CDS (with its interlinked structure of ADS and NHGs) is registered as an autonomous charitable organisation to shield it from direct government intervention, while giving it negotiating power with the government on behalf of the community. The K. Network mediates with the PRIs and the K. Mission. The group farms (termed JLGs) are embedded in the NHGs and linked with the ADS and the CDS through the K. Network. Group farming via JLGs accounted for 12 per cent of the K. Mission's total expenditure in 2011, making it financially the Mission's second most important programme (personal communication, Rahul Krishnan, K. Mission, Thiruvananthapuram 2016).

This three-pillar model is, I believe, unique in India. The K. Network – separate and autonomous of the PRIs – provides a mechanism for people's participation in development planning, while also receiving government support through the K. Mission. Moreover, the geographic congruence of the CDS and the *panchayats* means that they can interface in planning.

Several enabling factors led to the creation of this three-pillar organisational form. First, there was the fortuitous coming together of three key individuals as members of a Special Task Force set up by the Kerala government in 1997. All three men had long experience in governance, were committed to inclusive development and people's participation, and had the power and mandate to implement their ideas. These were Thomas Isaac, a member of Kerala's State Planning Board and former academic economist with a strong commitment to decentralisation; S. M. Vijayanand, Secretary, Local Self-Government, Kerala; and P. Bakshi, Chairman and Managing Director of NABARD, Kerala. Their recommendations led to the setting up of the State Poverty Eradication Mission in 1998, named the *Kudumbashree* Mission (K. Mission). They also conceptualised the three-pillar structure, drawing on a range of ideas including decentralised governance, participative planning, economic inclusion by gender and caste, and autonomy from political interference. Between them, they brought complementary skills to build the organisation.

> Dr. Thomas Isaac brought political acceptability. I focused on development policy. Both of us were concerned about the power wielded by the local government and sought ways of creating governance institutions to tackle it. Dr. Bakshi focused essentially on credit linkages and the economic roles of NHGs (Author's telephonic interview with S. M. Vijayananda on 11 March 2016).

Other significant figures who helped shape and stabilise *Kudumbashree* in its formative stages were the K. Mission's executive directors, Mr. T. K. Jose and Ms. Sarada

Muraleedhan, supported by a body of committed local staff. In other words, several important elements of the policy framing and implementation came together fortuitously.

Autonomy

The K. Network provided independence from the local government while also linking it with the local government, but not hierarchically. Making the K. Network autonomous of the *panchayat* was a masterstroke in organisation building.

As S. M. Vijayananda elaborated:

> We wanted a structure free from the political party interference which could distort the identification of beneficiaries and the decisions made; it could become the agency of the *panchayat* thus undermining its natural creativity. Basically we thought that if the local government starts meddling with the K.Network, it will be sucked into party politics. That would kill it. People will take positions and women will be backseat drivers.
>
> We wanted the K.Network to work with the *panchayats* and not be under the *panchayats*. By being autonomous, the K.Network would become strong, organized. It could engage effectively with the local government to ensure better governance, but would not be bullied by the local government.
>
> The local government was concerned that the women's groups would be getting a lot of money over which it had no oversight … We said: 'If you are giving money to the women's groups you can ask for accounts, but you can't interfere' (Author's telephonic interview with Vijayananda on 11 March 2016).

Thomas Isaac, in particular, had done considerable thinking on democratic decentralisation and also published a book on the subject (Isaac and Franke 2001). Although decentralisation and creating an autonomous network met with some resistance from elements of the government who felt power would go out of their hands, the ideas could not be dislodged. As Sarada Muraleedharan put it, "There was a debate and decentralisation won. It was a paradigm shift!"

SHGs vs. NHGs

Kudumbashree's second important organisational innovation was the use of NHGs as the base unit for bottom-up participation and planning. In most parts of India, SHGs focused on thrift and credit, but in some states, such as Andhra Pradesh, SHGs went further to provide community linkages, and used the federation structure for scaling up (NCAER 2008). In Kerala, however, the SHG model itself was modified to form neighbourhood groups, NHGs.[15]

This adaptation had several advantages, as elaborated by those involved in establishing *Kudumbashree*. First, NHGs could go beyond saving-and-credit to become units of micro-planning which could feed into the final plans of the CDS and the *panchayats*. The plans prepared by drawing on grassroots ideas would be more relevant to local economic and ecological conditions. Second, NHGs could serve as sub-units of the *gram sabhas* (village council general bodies), which in Kerala are large and male-dominated, making it difficult for poor women to have a voice. An NHG of 10–20 members would enable effective local participation. Third, NHGs could ensure inclusiveness, since every household in a neighbourhood could have a representative member, and members who migrated on marriage could join the NHG in the new destination. The members would

know each other, and mixed-caste neighbourhoods would help to include low-caste and poor members as well. These neighbourhood groups, similar but not identical to SHGs, would thus provide the bedrock of the first tier of community participation in Kerala. NHG members could start any group enterprise, including group farming. Each NHG could have several group farms.

The move to group farming after the formation of the K. Network was not immediate. In 1998, the K. Mission invited creative ideas for improving women's livelihoods. After trying other types of microenterprises, often unsuccessfully, group farming was initiated. There was thus experimentation within the programme, and a two-way learning process.

Overall, the Kerala experiment was part of the state government's larger commitment to inclusive development and women's empowerment, to be implemented by promoting group enterprises, of which group farming was one of the most significant. In Telangana, however, state government support was sought *after* the idea of group farming had evolved from activist experience, grassroots experiments, and academic discourse, with an international organisation – the UNDP – as the lead funder. And the implementing organisational structures were vastly different in the two states.

5. Group composition

Telangana and Kerala also differed notably in the principles guiding group composition – their gender, heterogeneity, and size. Existing collective action theory pointed to the effectiveness of groups that were socio-economically homogenous and small in size (Olson 1965), but subsequent theoretical developments, drawing on ground experience, recognised the potential benefits of heterogeneity in certain contexts (Marwell and Oliver 1988; Baland and Platteau 1996). The discussion on group homogeneity and collective action, however, was focused largely on *household level* differences (such as class, caste and ethnicity) and not on *individual level* gender differences.

Similarly, in prior non-socialist initiatives of group farming, the family rather than individuals constituted the cooperating unit, and women remained largely confined to supportive roles, rather than taking up leadership roles. In India, the family was represented by the male household head, except in female-headed households, and in the 1960s cooperative farms were constituted of family units. Moreover, the collective farming experiments in the first four waves did not seek gender parity, either within socialist regimes or elsewhere. In the USSR's collectivised farms, 85 per cent of women employees relative to 66 per cent of male employees worked in unskilled jobs, which carried lower pay than skilled jobs (Swain 1985, 99). In China, again, women earned lower work points on the communes than men (Swain 1985). The shift to women-only group farming in this fifth wave was therefore a clear break from the past.

Why only women?

The idea of women-only group farms was propelled not only by an interest in women's empowerment, but also by the success of women's groups over men's groups in other contexts. For example, in micro-finance, women-only groups had better loan repayment records than men's groups, and the Grameen Bank, which began with both women's and men's groups, ended up almost entirely with women-only groups. The SHG

movement also ended up with almost 80–90 per cent women's groups. Moreover, many NGOs believe women's groups work better, as emphasised both by P. Prasanthi and Kameshwari Jandhyala. The latter noted:

> I do think that women's groups work better. Whether it is the *Mahila Samatha* or the DDS, they are more willing to work in collectives. Their lives are so difficult, and I believe their life experience has shown that if they are together they can deal better with the issues that affect them (Author's interview with Kameshwari Jandhyala in Hyderabad on 11 November 2014).

In any case, since the *Mahila Samatha* programme was focused on women's empowerment and SDGs were based on the pre-existing *sanghas*, all-women groups were a natural corollary for setting up group farming in Telangana.

In Kerala, the NHGs were not initially confined to women, but it was soon realised that rather few women attended *gram sabhas* due to restrictive social norms, while the SHG movement contained mostly women. Hence, to ensure women's inclusion, the K. Network decided to focus specifically on women, as Thomas Isaac and S. M. Vijayananda explained,

> With NHGs constituted of both men and women we found that the meetings were not regular. In contrast, SHG women met once a week for economic transactions. Moreover, women needed a space to sit for 3–4 hours. So, we decided to go for women-only NHGs where women could identify their priorities and make suggestions to the *gram sabha* (Author's interview with Thomas Isaac in Thiruvananthapuram on 4 February 2015).

> The move to all-women NHGs was based on our understanding that women tend to recognise the implications of poverty better. They understand savings better. They are more careful with thrift … And specially in Kerala, the women's groups tend to function more harmoniously than men's groups, which get divided by politics. Men tend to come under diverse political influences (Author's telephonic interview with Vijayananda on 11 March 2016).

Sarada Muraleedharan adds another dimension: "Initially NHGs had men talking and women serving the tea. Therefore, we mooted the idea of women-only NHGs". (Author's interview on 14 February 2015). The group farms were constituted by women who were NHG members or belonged to families with an NHG member.

Heterogeneity

On the question of group heterogeneity, again, Telangana and Kerala diverged. In my sample survey, 86 per cent of Telangana's SDG members belonged to SC/Scheduled Tribe (ST) communities with virtually no upper-caste women (Agarwal 2020). The SDG composition reflected APMSS's emphasis on constituting *sanghas* of poor women from SC backgrounds. In Kerala, by contrast, 14 per cent of the JLG members in my sample were upper-caste and only 9 per cent were SC/ST, the rest being Other Backward Castes. Overall, only 9.1 per cent of Kerala's population is SC, compared to 15.5 per cent of Telangana's population, where another 9 per cent is ST.

In their decisions on group composition, neither state followed old collective action theory, which would have supported socially homogenous groups of small size. Rather, they were driven by specific aims. APMSS rooted for large numbers of the lowest caste

and most disadvantaged women when they formed the *sanghas* (prior to group farming), since social empowerment was their primary goal.

> In the districts where we are working, the marginalised and excluded are the dalits, and if you want to promote leadership and more equal participation in local community affairs and governance, you need to start with them. You can't have mixed groups.
>
> Our view was that multiple groups of poor women organised into mixed caste SHGs would not go far, since leadership would always go to upper-caste women. In the *sangha* model, we wanted to create one platform for dalit or marginalised women, but disadvantaged Muslim women were also included in districts which had them (Author's interview with Kameshwari Jandhyala in Hyderabad on 11 November 2014).

Kerala proactively deviated from this model and encouraged some heterogeneity, partly to promote inclusiveness, since the groups were embedded in neighbourhoods which, in Kerala, are less segregated by caste and religion than in Telangana, and partly for ensuring leadership. Hence Kerala's JLGs were more caste and class diverse, although within limits, since the majority were still backward caste and poor.

> Local women's leadership does not come from the poorest of the poor. It comes from those who have some education and are just above the poverty line. In Kerala, poverty did not decline solely by the actions of the poor, but the joint actions of the poor and less poor. So, we were strictly against homogeneity based only on the poor. Anyway, Kerala's farmers are small, normally owning 35 cents or so of land.
>
> Some did argue that the better-off will capture the organisation. So, we stipulated that NHG meetings where tea is served would rotate across households – poor and less poor, upper and lower caste. Such practices help ensure that no section captures the group (Author's interview with Thomas Isaac in Thiruvananthapuram on 4 February 2015).

Ms. T. N. Seema recounted a case where some upper-caste women were not attending meetings held at the homes of SC members. "We asked two of them: 'How can you be part of *Kudumbashree* without going to an SC member's house? Are you in or out?' They returned in two days to say they would go to the SC woman's house".[16] According to T. K. Jose (Executive Director of K. Mission from 1998 to 2006): "Caste is not a big problem for Kerala. SCs in Kerala are not living in their own hamlets". Valsala Kumari (Executive Director of K. Mission from 2012 to 2016) noted, "Economic incentives also help break caste barriers and get people to cooperate". When *Kudumbashree* began, its membership was restricted to poor families, but later it became more economically heterogeneous:

> Initially *Kudumbashree* was oriented to be a poverty eradication programme through women's empowerment. Rather few members owned cultivable land. But, around 2007–2008, the orientation was changed from being mainly a poverty reduction programme to a women's empowerment programme. So, women did not need to come only from very poor families. (Author's interview with T. K. Jose, former Executive Director, K. Mission, 13 December 2015).

Mr. N. Jagajeevan, who was deeply involved in the People's Plan Campaign, also emphasised that heterogeneity was advantageous, "because then NHGs and JLGs have more social connections, are better accepted by different segments of society, and provide an economic cushion to the group" (Author's interview on 3 February 2015).

Group size

Telangana and Kerala differed too on appropriate group size. In Telangana, since all *sangha* women could join, most SDGs were large, ranging from 10 to 54 members, with the average size being 25. And since there was one *sangha* per village, there was only one SDG per village. According to P. Prasanthi,

> The APMSS understanding is that a large group can influence the *panchayat* and local policy better than a small group, so we went for one *sangha* per village. Also, the confidence of SC/ST women tends to be low, so we thought a bigger group would strengthen them and give them voice in the community.
>
> We continued with this idea for the livelihoods programme … At that time nobody thought a large size would be a constraint. At times we did feel that more than 30 was perhaps too large and 20 or so would be better, but we did not think of groups as small as 6–7 members (Author's interview with P. Prasanthi in Hyderabad on 30 July 2014).

In Kerala, however, JLGs are smaller, limited both by economic considerations and NABARD specifications of 4–10 members. It was also recognised that larger groups would reduce per capita returns. In my sample, JLGs had 3–12 members, the average being six.

In short, a variety of ideas and assumptions underlay the differences in organisational structures and group composition between the two states. In Kerala, these issues were more carefully thought through and debated than in Telangana, where group size was determined by prior *sangha* size, and homogeneity was dictated by considerations of social empowerment rather than economic effectiveness.

6. Implications and outcomes

The differences between Telangana and Kerala in their organisational structures, group composition, and state support, had implications for the economic performance of group farms relative to individual farms in the sampled districts of each state, as judged by their productivity and profits. Effectively the comparison was between all-women groups cultivating leased in land and individual family farms, 95 per cent of which were male managed in both states, and which cultivated mostly owned land. The economic results are important not only for judging the potential success of group farming in improving livelihoods, but also because they are likely to influence policymakers about the desirability of replicating group farming elsewhere.

Economic effects

The detailed results are given in my article (Agarwal 2018) and summarised here. In Kerala, the group farms did significantly better than individual farms: their annual average value of output was 1.8 times greater, and annual average net returns per farm (calculated by subtracting all paid out costs from the annual value of output) were five times higher. They did especially well in banana cultivation, entering into contracts in niche markets for special varieties. In Telangana, however, group farms performed much less well than individual farms in their average annual productivity, although

they were broadly on par in their annual net returns per farm, since they saved on purchased inputs, especially hired labour.

Notably, in both states, group farms performed much better with commercial crops than traditional foodgrains, such as rice, in which individual male farmers had an advantage, since they owned good quality land and had long experience in rice cultivation. Since SDGs focused mainly on cereals due to APMSS' strong emphasis on foodgrains, the economic returns of most SDGs were adversely affected by crop choice.

Moreover, since Telangana's SDGs were constituted largely of poor SC women, they faced difficulties in leasing land. Upper-caste landowners were less willing to lease to SDGs, and the geographic distance of SC communities from upper-caste settlements also reduced SDG access to land near their homesteads (Agarwal 2020). On this count, APMSS could provide them rather little support. By contrast, the caste heterogeneity of Kerala's JLGs gave them a wider social circle to draw upon. They also sometimes received informal support from the K. Network for accessing land. Hence 71 per cent of Telangana's SDGs were cultivating land leased only from within the group, while in Kerala only 13 per cent were doing so, with the rest leasing land from other landowners, wholly or partly (Agarwal 2020).

Overall, Telangana's groups faced a wide range of constraints, including inadequate state support (technical and financial); groups constituted almost entirely of SC women, which limited their reach for accessing land, inputs, and technical information; large group size, which made coordination more difficult and reduced per capita gains; and the emphasis given to foodgrains by the programme implementing NGO. In contrast, Kerala's group farms enjoyed support from the local government and the K. Network. They had bank linkages for obtaining subsidised credit; financial incentives for high performing groups; the freedom to choose their crops, including commercially profitable ones; small group size; and high literacy and socio-economic heterogeneity, which broadened their social networks and economic reach in accessing land, inputs and markets. Some Kerala groups even used their profits to purchase land collectively.[17]

In 2015, when I asked P. Prasanthi what she thought Telangana should have done in hindsight, she observed,

> We should have trained some *sangha* women in agricultural practices to constitute a technical support team for the SDGs. We should also have tied up with the government's agricultural department for continuous support to *sanghas* and asked them to place a mandal level team to back the SDGs. The government's ATMA [Agricultural Technology Management Agency] programme which had a particular emphasis on women farmers could also have been better used.[18] Another aspect was water supply – we did not look at the potential for rainwater harvesting. Moreover, the groups were too large. We should have limited the numbers and formed two groups per village for viability (Author's interview with P. Prasanthi on 30 July 2014).

Nevertheless, both states were able to broaden women's economic, social and political horizons. Women in both states emphasised that group farming had greatly improved their ability to use economic institutions such as banks, agricultural departments, and markets for land and inputs. They also reported improved knowledge of new cultivation practices, which they used for their family farms as well (Agarwal 2018, 2020).

Social and political implications

Socially, too, in both states, women reported being more respected by their communities and families (Agarwal 2020). This was especially important in Telangana where the women faced substantial caste-related disadvantage. Moreover, for social empowerment, large groups can be more effective. Social cohesion and the causes they took up (such as domestic violence and child marriage) had a strong uplifting effect on *sangha* women in Telangana, whereas Kerala's JLGs were not especially active on this front.

In addition, in both states, group members stood for local *panchayat* elections and many won. In Kerala, this effect was stronger, since every political party is now reported to seek candidates from the K. Network for *panchayat* elections (Author's interview with Jagajeevan on 3 February 2015). This increased JLG women's political clout and strengthened the synergy between the K. Network and the *panchayats*, as was anticipated by those designing *Kudumbashree's* governance structure.

Sustainability

In Telangana, the UNDP project ended in 2005, and with the dissolution of the *Mahila Samatha* programme in 2016 APMSS' support to SDGs also petered out. The programme suffered not only from the very short-term commitment of the central government and the UNDP, but also from political changes, including the bifurcation of Andhra Pradesh in June 2014.

In contrast, *Kudumbashree's* organisational framework has provided a foundation for sustainability. In particular, the creation of an autonomous K. Network, that had formal links with the K. Mission, has enabled the programme to weather political changes. Indeed, since the mid-1990s, we have seen a veritable see-saw between the LDF government, which dominated in the 1996–2001 and 2006–2011 periods, and the United Democratic Front (UDF) government, which dominated during 2001–2006 and 2011–2016. In 2012, *Kudumbashree* faced a political challenge under the UDF, when the then Minister for Rural Development announced plans to launch the National Rural Livelihoods Mission in Kerala through all "competent NGOs", remarking that the K. Mission was "not competent enough to implement the national scheme". This move to replace *Kudumbashree* by other agencies provoked protests by activists, researchers and many ordinary citizens of Kerala, leading to the proposal being shelved (*The Hindu* 2012). The protests underlined the extent to which *Kudumbashree* was able to garner support from a wide section of the elite and middle classes, not least due to the reach of its programmes, including urban sanitation and waste management (Kumar 2014).

7. Reflections and replication

Reflections

In sharp contrast to socialist collectivisation, which paid rather little attention to the hardships faced by small peasants due to the collectivisation drive, the fifth wave of group farming carved out its own model, aimed at eradicating poverty and empowering poor

women. For this, it drew particularly on local experience with SHGs and women's collectives.

The application of this experience, however, led to divergent approaches on the ground. Hence, while both Kerala and Telangana developed the idea of group farming through interactions between experts and activists, the type of institutional transformation attempted by each differed in many respects, and affected the functioning and sustainability of the two programmes. In particular, there were differences in leadership, institutional structure, and group composition.

Leadership played a key role in shaping the programmes. The APMSS leaders were almost all women, while in Kerala they were predominantly men, but the difference in their degree of leverage was due less to their gender and more to the official positions they occupied. The Telangana leaders came from civil society, with deep commitment and substantial experience especially in women's *social* empowerment. Kerala's programme leaders had significant administrative experience and authority, and brought acumen that covered the political, bureaucratic, *and* financial spheres. Moreover, the initial executive directors of the K. Mission were not only from the government but also had prior experience in developing innovative community programmes and were deeply committed to the idea of *Kudumbashree*.

Although leaders in both states sought to create institutions that could serve as a bulwark for the women's groups against local power centres, the institutions created were not equally effective. Both built federated structures, but APMSS's *sangha* federations depended more on numbers for dealing with *panchayats* and the upper-caste rich, and lacked structured links with the PRIs or the bureaucracy. In contrast, the K. Network could engage with *panchayats* on an equal basis and also draw on government support.

Moreover, APMSS remained embedded in a framework created for social empowerment (such as large group size and socio-economic homogeneity), assuming that this would also prove effective for economic empowerment, while *Kudumbashree* promoted economic empowerment as *a means* to social empowerment. It went for small group size, a degree of socio-economic heterogeneity, and crops with expanding markets.

There were differences too in expansion and scaling up. The Telangana programme remained confined to its initial five districts, and when the UNDP-GoI involvement ended many groups dissolved. By 2011 only three districts had substantial numbers of active SDGs, although even this was laudable, given limited state support. By contrast, in Kerala, Kudumbashree continues to grow in numbers and reach, and now covers all districts of the state. Although, over time, some groups have become inactive, new groups have emerged. Moreover, since Kerala's NHGs are also units of micro-planning, they help sustain a bottom-up process of identifying problems and finding solutions.

The above factors played out differently in the gains of group farming in the two states. Economically, Kerala's group farms have performed strikingly better than individual farms. The sustained nature of state support in capacity building, bank linkages, incentives, and similar measures, has enabled the women to overcome gender inequalities in the production process to a greater extent than in Telangana. Socially, however, the Telangana groups – which faced multiple layers of disadvantage (caste, class and gender) – have traversed longer distances than the Kerala groups. Politically, although women have gained in both states, the institutional structure created by *Kudumbashree* has paid greater dividends in outreach and bargaining power.

Replication

Is Kerala special, or is the programme replicable elsewhere? Kerala does have some distinct advantages, such as its 1960s–1970s redistributive land reform which greatly reduced economic and social inequality (Franke and Chasin 2000); high female literacy; and a matrilineal system which historically covered some 20–30 per cent of households (Agarwal 1994). The history of matriliny probably explains why 41 per cent of the JLG women in my sample owned some land (compared with 19 per cent of the SDG women), although patriarchal attitudes also persist in Kerala (Eapen and Kodath 2002).

At the same time, many aspects of the *Kudumbashree* model are potentially adaptable, and are necessary to adapt for effectiveness. The most important is its three-pillar approach to governance, in which communities have their own body of representation, independent of the *panchayats*. This structure has helped the *Kudumbashree* programme to survive for almost two decades, despite successive changes in government. Something akin to the K. Network, constituted of formally registered community development societies with their bottom-up representation and democratic elections, could be created by other states. Existing SHG federations could also be adapted for this purpose.

Similarly, the lessons Kerala offers on the size and social composition of groups, and the importance of giving groups autonomy in crop choice, can be applied elsewhere. Perhaps less easy (but not impossible) to replicate, is the formalisation of government commitment to making group farming, involving women, a central element of its rural programmes for poverty alleviation and livelihoods transformation.

In any case, as the results of these experiments percolate, they will help create a more positive narrative about group farming, to overcome the historical negatives. Kerala's experience, in particular, provides considerable scope for optimism on this count. In fact, successful experiments of group farming have emerged in Eastern India and Nepal in recent years, albeit on a small scale (Sugden et al. 2020). They have taken cues from Kerala and Telangana, but also innovated to create groups adapted to the local context.

Notes

1. The sample districts were earlier part of undivided Andhra Pradesh. Presently, they fall under Telangana state.
2. They have been called "waves" since they occur within specific time spans and traverse more than one region or country.
3. For the USSR, see especially Robinson (1967) and Nove (1969). For China, see Lin (1990), Putterman (1997), and Li (2018).
4. See, Borda (1971) for Latin America, Apthorpe (1972) for Africa, and Goyal (1966) for India. Israel's Kibbutz also needs a mention, although it was a unique form (Gavron 2000).
5. Also see, various issues of the *Indian Journal of Agricultural Economics* for the 1950s and 1960s.
6. India promoted cooperative farming until the end of the Third Five-Year-Plan (1961–66), but proposed no new schemes in its Fourth Plan (1969–1974) due to lack of progress.
7. See Agarwal and Dorin (2019) for France, and Almas (2010) for Norway.
8. See, Sabetes-Wheeler and Childress (2004) for Kyrgyzstan; Sabates-Wheeler (2002) for Romania; and Mathijs and Swinnen (2001) for East Germany.
9. In particular, I spoke with Neera Burra (UNDP India) and gave a talk organised by UNDP India on October 18, 1996, elaborating on the need to promote group cultivation by women. I

gave a similar talk at a workshop organised by the Ministry of Agriculture's agricultural extension department. Moreover, in the government's Ninth Five Year Plan formulated in 1996–1997, paras 2.1.130 to 2.1.134 were based entirely on my note to the Planning Commission, in which, in para 2.1.133, I specifically discuss joint cultivation by women (Government of India 1997–2002).

10. Mr. T.K. Jose, who played a foundational role as the Executive Director of *Kudumbashree* (1998–2006) during its formative years, was also District Collector in Mallapuram in the 1990s.
11. The People's Plan Campaign, launched in 1996–97 by Kerala's LDF Government, was a massive exercise in decentralised planning, linked with the devolution of administrative and fiscal powers to the local government. The Campaign asked villagers to assess their priority needs. It also set up Task Forces in *panchayats* to prepare development projects; and constituted expert committees to draw up annual plans at the block and district levels based on these inputs, under the oversight of the Kerala State Planning Board (see also Isaac and Franke 2001).
12. One Canadian dollar is approximately 54 Indian rupees.
13. This is the nomenclature used for the Mahila Samkhya programme in Andhra Pradesh.
14. Although a JLG, or Joint Liability Group, is a generic term used for a group using NABARD's bank linkage scheme, in Kerala, all group farms are specifically termed JLGs.
15. On the characteristics of NHG members, see Kannan and Raveendran (2017).
16. The Self Employed Women's Association (SEWA) similarly found that within a year of forming groups, poor women overcame their caste-related discord (personal communication, Renana Jhabvala, Chairperson SEWA Bharat).
17. This is notable, given that only a very small percentage of women in India own land individually, even allowing for the somewhat better record of south Indian states (Agarwal, Anthwal, and Mahesh 2020).
18. ATMA is supported by the central government in seven Indian states, including Andhra Pradesh. It is responsible for all technology dissemination to farmers at the district level, and expected to pay particular attention to women farmers and use a group approach.

Acknowledgements

I would like to warmly thank all the people I interviewed for this paper (listed in Appendix A), for their time and deep insights on the initiation and implementation of the group farming projects in Telangana and Kerala. For financial support, I thank the ESID project of the Global Development Institute at the University of Manchester, and acknowledge the prize research funds awarded to me by the International Balzan Prize Foundation. I also thank the Institute of Economic Growth, Delhi, for logistical backing. And I am grateful to Sam Hickey, Kunal Sen, Bruno Dorin, and the two anonymous reviewers of the journal for their helpful comments on an earlier draft.

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References

Agarwal, B. 1994. *A Field of One's Own: Gender and Land Rights in South Asia*. Cambridge: Cambridge University Press.
Agarwal, B. 2003. "Gender and Land Rights Revisited: Exploring New Prospects via the State, Family and Market." *Journal of Agrarian Change* 3 (1 and 2): 184–224.
Agarwal, B. 2010a. "Rethinking Agricultural Production Collectivities." *Economic and Political Weekly* 55 (9): 64–78.
Agarwal, B. 2010b. *Gender and Green Governance: The Political Economy of Women's Presence Within and Beyond Community Forestry*. Oxford: Oxford University Press.
Agarwal, B. 2014. "Food Sovereignty, Food Security and Democratic Choice: Critical Contradictions, Difficult Conciliations." *Journal of Peasant Studies* 41 (6): 1247–1268.
Agarwal, B. 2018. "Can Group Farms Outperform Individual Family Farms? Empirical Insights from India." *World Development* 108: 57–73.
Agarwal, B. 2020. "Does Group Farming Empower Women? Lessons from India's Experiments." *Journal of Peasant Studies* 47 (4): 841–872.
Agarwal, B., P. Anthwal, and M. Mahesh. 2020. "Which Women Own Land in India? Between Divergent Data Sets, Measures and Laws." GDI Working paper 2020–43, The University of Manchester, UK.
Agarwal, B., and B. Dorin. 2019. "Group Farming in France: Why Do Some Regions Have More Cooperative Ventures Than Others?" *Environment and Planning A: Economy and Space* 51 (3): 781–804.
Almas, R. 2010. "I Have Seen the Future and It Works: How Joint Farming May Solve Contradictions Between Technological Level and Farm Structure in Norwegian Dairy Production." In *From Community to Consumption*, edited by A. B. Bonanno, R. Jussauma, Y. Kawamura, and M. Shucksmith, 3–16. Bingley: Emerald Group Publishing Limited.
APMSS. 2005. *Annual Report 2004-05*. Hyderabad: Andhra Pradesh Mahila Samatha Society.
Apthorpe, R. 1972. *Rural Cooperatives and Planned Change in Africa: An Analytical Overview*. Geneva: UNRISD.
Baland, J. M., and J. P. Platteau. 1996. *Halting Degradation of Natural Resources: Is There a Role for Rural Communities?* Oxford: Clarendon Press.
Baviskar, B. S. 1980. *The Politics of Development: Sugar Co-operatives in Rural Maharashtra*. Delhi: Oxford University Press.
Berend, I. T. 1990. *The Hungarian Economic Reforms 1953-1988*. Cambridge: Cambridge University Press.
Borda, O. F. 1971. *Cooperatives and Rural Development in Latin America*. Geneva: UNRISD.
Burra, N. 2004. "Empowering Women for Household Food Security: UNDP's Experience." United Nations Development Programme, Delhi.
Devi, S. 2006. *Employment of Labour and Rural Development*. New Delhi: Sarup & Sons.
Eapen, M., and P. Kodath. 2002. "Family Structure, Women's Education and Work: Re-Examining the High Status of Women in Kerala." Working Paper 341, *Centre for Development Studies*, Thiruvananthapuram, Kerala, India.
Franke, R. W. 1993. *Life is a Little Better: Redistribution as a Development Strategy in Nadur Village, Kerala*. New Delhi: Promilla & Co. Publishers.
Franke, R. W., and B. H. Chasin. 2000. "Is the Kerala Model Sustainable? Lessons From the Past, Prospects for the Future." In *Kerala: The Development Experience: Reflections on Sustainability and Replicability*, edited by G. Parayil, 16–39. London and New York: Zed Books.

Frankel, F. 1978. *India's Political Economy 1947-1977: The Gradual Revolution*. New Jersey: Princeton University Press.
Ganguli, B. N. 1953. "Land reform in a New China." *Occasional Paper No. 9*. Delhi: Ranjit Printers and publishers.
Gavron, D. 2000. *The Kibbutz: Awakening From Utopia*. Lanham: Rowman & Littlefield.
Government of India (GOI). 1997-2002. *The Ninth Five Year Plan*, Vol. II (1997–2002). Planning Commission of India, Government of India.
Goyal, S. K. 1966. *Cooperative Farming in India*. Bombay: Asia Publishing House.
Heller, P. 1999. *The Labour of Development: Workers and the Transformations of Capitalism in Kerala, India*. Ithaca and London: Cornell University Press.
The Hindu. 2012. "Kudumbasree Not Competent to Implement NRLM," Thiruvananthapuram edition, 29 February.
Isaac, T., and R. W. Franke. 2001. *Local Democracy and Development: People's Campaign for Decentralised Planning in Kerala*. Delhi: LeftWord.
Jandhyala, K. 2012. "From *Sanghas* to Federations." In *Cartographies of Empowerment: The Mahila Samakhya Story*, edited by V. Ramachandaran, and K. Jandhyala, 105–138. Delhi: Zubaan Books.
Kannan, K. P., and G. Raveendran. 2017. "Poverty, Women and Capability: A Study of the Impact of Kerala's *Kudumbashree* System on Its Members and Their Families." Report. Thiruvananthapuram: Laurie Baker Centre for Habitat Studies.
Kumar, A. N. 2014. "Role of *Kudumbashree* in Waste Management," PhD thesis, Mahatma Gandhi University. http://shodhganga.inflibnet.ac.in/handle/10603/19608.
Li, H. 2018. "Institutions and Work Incentives in Collective Farming in Maoist China." *Journal of Agrarian Change* 18: 67–86.
Lin, J. Y. 1990. "Collectivisation and China's Agricultural Crisis in 1959-1961." *Journal of Political Economy* 98 (6): 1228–1252.
Lordachi, C., and A. Bauerkämper, eds. 2014. *The Collectivization of Agriculture in Communist Eastern Europe: Comparison and Entanglements*. Budapest and New York: Central European University Press.
Marwell, G., and P. E. Oliver. 1988. "Social Networks and Collective Action: A Theory of the Critical Mass, III." *American Journal of Sociology* 94 (3): 224–253.
Mascarenhas, R. C. 1988. *A Strategy for Rural Development: Dairy Cooperatives in India*. New Delhi: Sage publications.
Mathijs, E., and J. F. M. Swinnen. 2001. "Production Organisation and Efficiency during Transition: An Empirical Analysis of East German Agriculture." *The Review of Economics and Statistics* 83 (1): 100–107.
Menon-Sen, K. 2012. "Songs of Change in a Minor Key?" In *Cartographies of Empowerment: The Mahila Samakhya Story*, edited by V. Ramachandaran, and K. Jandhyala, 139–170. Delhi: Zubaan Books.
NCAER. 2008. *Impact and Sustainability of SHG Bank Linkage Programme*. New Delhi: National Council of Applied Economic Research.
Nove, A. 1969. *An Economic History of the USSR*. London: Allen Lane, The Penguin Press.
Olson, M. 1965. *The Logic of Collective Action: Public Goods and the Theory Of Groups*. Cambridge: Harvard University Press.
Ostrom, E. 1990. *Governing the Commons*. Cambridge: Cambridge University Press.
Putterman, L. 1997. "China's Collectivisation Puzzle: A New Resolution." *Journal of Development Studies* 33 (6): 741–763.
Robinson, G. T. 1967. *Rural Russia Under the Old Regime: A History of the Landlord-Peasant World and a Prologue to the Peasant Revolution of 1917*. New York: The Macmillan Company.
Ruben, R., and Z. Lerman. 2005. "Why Nicaraguan Peasants Stay in Agricultural Production Cooperatives." *European Review of Latin American and Caribbean Studies* 78: 3–19.
Sabates-Wheeler, R. 2002. "Farm Strategy, Self-Selection and Productivity: Can Small Farming Groups Offer Production Benefits to Farmers in Post-Socialist Romania." *World Development* 30 (10): 1737–1753.

Sabates-Wheeler, R., and M. D. Childress. 2004. "Asset-pooling in Uncertain Times: Implications of Small-Group Farming for Agricultural Restructuring in the Kyrgyz Republic." IDS Working Paper 239, Institute of Development Studies, University of Sussex.
Singh, C. 1959. *Joint Farming X-rayed. The Problem and Its Solution*. Bombay: Bhartiya Vidya Bhavan. Chaupatty.
Sugden, F., B. Agarwal, S. Leder, P. Saikia, M. Raut, A. Kumar, and D. Ray. 2020. "Experiments in Farmer Collectives in Eastern India and Nepal, Process, Benefits and Challenges." *Journal of Agrarian Change*. https://doi.org/10.1111/joac.12369.
Swain, N. 1985. *Collective Farms Which Work?* Cambridge: Cambridge University Press.
Tankha, A. 2012. *Banking on Self-Help Groups: Twenty Years On*. Delhi: Sage Publishers.

Appendix. Persons interviewed

State and person interviewed	Designation of person interviewed
TELANGANA	
Ms. Kameshwari Jandhyala	Project Director, APMSS, 1992–1996 National consultant for *Mahila Samakhya*, 1996–2000, 2003–2006
Ms. Nandini Prasad	Project Director, APMSS, 1999–2003
Ms. P. Prasanthi	State resource person for *Mahila Samakya*, 2000–2004; State Project Director APMSS, 2004–2016
Ms. Kalyani Menon-Sen	Gender Advisor to UNDP, India, during project period, 1997–2004.
Ms. Neera Burra	UNDP, India, 1995–2007: Assistant Resident Representative for 10 years.
KERALA	
Dr. T.M. Thomas Issac	Member, State Planning Board during *Kudumbashree*'s initiation. Member of the three person Special Task Force set up in 1997 for identifying pathways to poverty eradication in Kerala. The Task Force conceptualised and initiated the establishment of *Kudumbashree*'s institutional structure.
Mr. S.M. Vijayananda	Secretary, local self-government, Govt. of Kerala, 1996–2001, 2004–2011. Member of the 1997 Special Task Force mentioned above. Chairman, Executive Committee, *Kudumbashree*, 1998–2001, 2004–2011
Dr. P. Bakshi	General Manager, NABARD, 1994–1999. Member of the 1997 Special Task Force mentioned above.
Mr. T.K. Jose	Executive Director, *Kudumbashree* Mission, 1998–2006[a]
Ms. Sarada Muraleedharan, IAS	Executive Director, *Kudumbashree* Mission, 2006–2012
Dr. K.B. Valsala Kumari	Executive Director, *Kudumbashree* Mission, 2012–2016
Mr. N. Jagajeevan	Associated with *Kudumbashree* since 1998. Worked in expert cell of State Planning Board and incharge of training in the People's Plan Campaign, 1996–2001
Ms. T.N. Seema	Member Rajya Sabha, 1996–2001. Active in the State Planning Board during *Kudumbshree*'s initiation period.
Prof. Mridul Eapan	Member, State Planning Board, 2006–2011. Professor, Centre for Development Studies.
Mr. Sabir Hussain	Assistant District Mission Coordinator, Pathanamthitta, 1998–2004. Kerala State Backward Classes Development Corporation, Pathanamthitta 2004–2006.
Mr. Liby Johnson	*Kudumbashree* Mission, Team Leader, Programme Officer, 2009–2013. *Kudumbashree* National Resource Organisation, Operating officer, 2013–16

Note: All interviews were conducted during 2014–16. The interviewees agreed to be cited by name.
[a]The first Executive Director, Mr. James Verghese, only served briefly in 1998.