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# Food sovereignty, food security and democratic choice: critical contradictions, difficult conciliations

Bina Agarwal

In recent years, the concept of 'food sovereignty' has gained increasing ground among grassroots groups, taking the form of a global movement. But there is no uniform conceptualization of what food sovereignty constitutes. Indeed, the definition has been expanding over time. It has moved from its initial focus on national selfsufficiency in food production ('the right of nations') to local self-sufficiency ('the rights of peoples'). There is also a growing emphasis on the rights of women and other disadvantaged groups, and on consensus building and democratic choice. This paper provides a critique of some of the major tenets of the food sovereignty movement. It recognizes that many developing countries may wish to pursue the goal of self-sufficiency in the context of the global food crises, and that it is important to promote social equality and democratic choice. Taken together, however, there can be serious contradictions between the key features of the food sovereignty vision, such as between the goals of national and local food self-sufficiency; between promoting food crops and a farmer's freedom to choose to what extent to farm, which crops to grow, and how to grow them; between strengthening family farming and achieving gender equality; and between collective and individual rights, especially over land ownership. The paper also reflects on the ways in which some of the food sovereignty goals could be better achieved through innovative institutional change, without sacrificing an individual's freedom to choose.

**Keywords:** food sovereignty; food security; democratic choice; cooperation; women farmers

#### 1. Food sovereignty: shifting definitions

In 1996, when it mooted the concept of food sovereignty, La Via Campesina focused on national self-sufficiency and diversity in food systems: 'Food sovereignty is the right of each nation to maintain and develop its own capacity to produce its basic foods, respecting cultural and productive diversity.' But as the idea of food sovereignty spread globally, embraced by a variety of groups, the definition broadened. In 2002, food sovereignty was envisioned as follows:

The rights of peoples to define their own food and agriculture; to protect and regulate domestic agricultural production and trade in order to achieve sustainable development objectives; to determine the extent to which they want to be self-reliant .... (Cited in Patel 2009)

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In February 2007, the definition became all encompassing, as elaborated in the Nyéléni declaration of the forum for food sovereignty, held by La Via Campesina in Nyéléni, Mali:

Food sovereignty is the right of peoples to healthy and culturally appropriate food produced through ecologically sound and sustainable methods, and their right to define their own food and agriculture systems. It puts the aspirations and needs of those who produce, distribute and consume food at the heart of food systems and policies, rather than the demands of markets and corporations. It offers a strategy to resist and dismantle the current corporate and food regime ... It defends the interests and inclusion of the next generation ... Food sovereignty prioritises local and national economies and markets, and empowers peasant and family farmer-driven agriculture. ... It ensures ... the rights to use and manage lands ... [It] implies new social relations free of oppression and inequality between men and women, peoples, racial groups, social and economic classes and generations. (For the full text, see Patel 2009, 673–4)

This expanding definition first moves from the right of self-reliance of *nations* (1996), to the rights of people to define domestic production and trade, as well as determine the extent to which they *want to be self-reliant* (2002). It then embraces everyone who is involved in the food chain – from producers to distributors to consumers (2007). This last definition also includes a range of other rights, such as the right to manage land, and emphasizes peasant empowerment, family farming, and freedom from gender-related and other inequalities.

There are many contradictory strains in this last definition, some of which have been discussed by Patel (2009), such as the inclusion of the rights of all producers and distributors without distinction between large and small, or between farm owners and landless farm workers. For the purpose of my discussion, however, there are other issues (which Patel does not touch upon) that can prove especially problematic, if all that is promised here is sought to be operationalized. First, there is the shift from an emphasis on national selfsufficiency (as a cry against global hegemony and dependency in access to food) in the 1996 definition, to arguing for local self-sufficiency in the 2002 definition, although it is not clear how small 'local' may be – it could even be read as meaning household self-sufficiency. The 2002 definition may also be seen as directed at state policies within countries and against multinational corporations controlling the food chains, but the necessity and even feasibility of local self-sufficiency is debatable. Second, although in both 2002 and 2007 there is an emphasis on democratic decision-making, the thrust is not the same. The 2002 definition allows people to be self-sufficient to the extent they want to be, giving primacy to individual choice, but in 2007 it is group decisions that matter. Paul Nicholson's elaboration of La Via Campesina's vision in his interview with Hannah Wittman (2009, 682), highlights this:

We have to move forward, making sure that our decisions and declarations are made well. This requires long debates and reflection because decisions have to be made deliberately. Consensus is fundamental ... We have a long-term vision and this means that our declarations and principles require lots of discussion. For this reason, the internal process within La Via Campesina is very important. It has to be based on debate. ...

But we may ask: how representative are those who have framed this vision? Can consensus really be reached or would we merely get majoritarianism? What space would dissenting voices have? How would perspectives stemming from gender, caste, ethnicity, and so on be incorporated, if they diverge from one another or from the majority? Although these are general questions of presence and representation that can apply to many contexts, they are particularly complex when applied to issues of livelihood and survival under substantial inequality and diversity between peoples and nations.

Third, the 2007 declaration forefronts *family* farming, even while emphasizing gender equality. But how will unequal gender relations embedded within families be tackled? Indeed an emphasis on family farming, which often depends on women's unpaid labour, could go in the opposite direction, unless intra-household inequalities are addressed. In addition, how does family farming gel with the idea of collective ownership of land?

These shifting/broadening definitions reflect what Patel succinctly calls 'definition by committee', a definition into which a diversity of people can read themselves. This may help in mobilizing people around a campaign, but is it workable on the ground?

This paper argues that La Via Campesina's 1997 definition of food sovereignty, namely the efforts by nation states to attain self-reliance, has some relevance in the wake of the 2007-2008 world food crises and the overdependence of many (especially southern) countries on others (especially northern countries) for their food security; although the balance of imports and home production would need to be worked out. There is also much merit in La Via Campesina's emphasis on environmentally sustainable agriculture. But it would be difficult to operationalize the 2007 definition in so far as farm households, based on their specific constraints and priorities, may choose options that are contrary to the vision, whereas limiting their choice would go contrary to the democratic principles of the right to choose that the declaration forefronts. In fact, in particular contexts, restrictions on choice could – paradoxically – be detrimental in economic terms precisely for the small farmers whose interests the declaration seeks to represent, but who were not all party to its framing. The issue of gender inequality is especially complex and may be difficult to address by prioritizing individual family farming. Alternative institutional arrangements based on proactive farmer cooperation in production, especially cooperation among women farmers, may be more conducive to gender equality, but that could go contrary to individual family farming.

Section 2 of the contribution spells out the nature of global interdependency in food production and distribution, thus examining the issues embedded in the 1996 definition - 'the right of nations'. The subsequent two sections then critically examine some key aspects of the 2007 vision of food sovereignty, namely the potential for achieving self-sufficiency given serious supply constraints faced by small farmers; the question of women farmers and gender equality; and the issue of democratic choice. Section 3 focuses on changing agrarian structures and the growing feminization of agriculture across the world's regions. It also outlines the constraints that small farmers and especially women face, in making a subsistence living or taking advantage of new opportunities, thus underlining the challenges of increasing production and achieving gender equality. Section 4 points to the difficulties of reconciling democratic choice and the promotion of a particular kind of agriculture. Evidence from India illustrates that the choices farmers want to make, given the constraints they face, can diverge substantially from La Via Campesina's vision of food sovereignty. It also highlights the contradictions between the democratic freedoms of individuals and the programmes identified on their behalf by global movements. Section 5 then presents a way by which small farmers could overcome their resource constraints, such as through local cooperation and resource sharing which would prove both economically and socially empowering. The issue of democratic choice nevertheless remains unresolved – will the cooperating farmers choose a path that is in line with the food sovereignty vision or will they follow other paths to fulfil their livelihood needs? The concluding Section 6 pulls together the various threads of the argument while raising further questions.

#### 2. The right of nations: self-sufficiency?

A dramatic rise in food prices in 2007–2008 shook the world out of its complacency. There was nearly a 40 percent increase in the food price index relative to 9 percent in 2006 (von Braun 2008). Wheat prices almost quadrupled and maize prices almost tripled between 2000 and 2008. The adverse effects of this price rise fell on foodgrain importing countries and on net buyers of foodgrains within countries (Quisumbing et al. 2008, von Braun 2008–09). The poor, and especially women and children in poor households, were the most adversely affected. The price rise, by some estimates, added 105 million to the poor, mostly in South Asia and sub-Saharan Africa (Ivanic and Martin 2008). Although the price spike in 2007–2008 was especially sharp, the overall upward trend in food prices is expected to continue. This, along with the prospect of price volatility, remains a major global concern.

An important factor underlying the price rise is the regional concentration of foodgrain production and exports. In 2008, Asian farmers produced 90 percent of the world's rice and around 40 percent of its wheat and total cereals. But most Asian countries consume what they produce – the exports come from only a few. For instance, although over 80 percent of rice exports came from Asia in 2008, the exporters were primarily Thailand, Vietnam, India and Pakistan and, beyond Asia, the USA. Similarly, 85 percent of wheat exports came from only four regions – North America, Russia, Europe and Australia; and 81 percent of maize exports came from North America and Latin America (especially Argentina and Brazil). Taking all cereal exports together, 65 percent came from North America and Europe (Figure 1).

This regional concentration not only makes food-deficit countries over-dependent on a few countries for fulfilling their needs, it also leaves them vulnerable to the vagaries of policy shifts in the exporting countries. This can influence global availability and prices

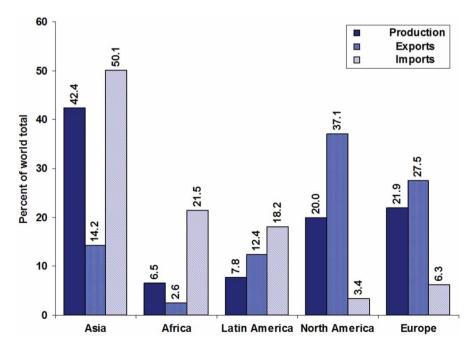


Figure 1. Production, exports and imports of total cereals by the world's regions, 2008 (percentages).

Source: Based on FAO Statistics (http://faostat.fao.org). Also reproduced in Agarwal (2013).

of foodgrains. Foodgrain supplies will fall and prices rise, for example, if the exporting countries shift large areas earlier devoted to foodgrains to biofuels, or reduce exports to cater to the needs of their own populations, or manage their agriculture inefficiently, or fail to control speculative hoarding. Adverse weather conditions can add to these negative effects. Such factors were important in the 2007–2008 price rise.

In that year, almost 100 million tonnes, or 4.8 percent of all cereals produced, went into ethanol production. Thirty-three percent of the corn production in the United States in 2008–2009 was similarly used. Facilitated especially by government subsidies for growing energy crops, American farmers shifted large areas from soybean and wheat to maize for biofuel. Moreover, several countries in Asia (e.g. China and India) and Latin America restricted their exports as a short-term response, further reducing foodgrain supply for importing countries.

In the long-term, we must also factor in climate change (CC) as a substantial threat to global food security. Although estimates of the extent of CC impact vary, they are consistent in their predictions that South Asia and sub-Saharan Africa will be the worst affected (Table 1; see also Wheeler and von Braun 2013). And these are also the regions where most of the world's poor live.<sup>2</sup>

Moreover, a rise in crop prices will not work as an incentive for higher production unless small farmers (typically cultivating under 2 hectares), who constitute the vast majority of farmers in developing countries, can overcome their supply constraints. In addition, if output lags behind population increase, the per capita calories available in 2050 will be lower than in 2000 throughout the developing world (IFPRI 2009). The poor will again face the brunt of this gap. Food security for the estimated 9 billion people by 2050 will need an extraordinary effort, even without climate change. With climate change, even with the best efforts at mitigation, poor farmers and especially women and children are likely to be affected adversely (IFPRI 2009, Wheeler and von Braun 2013).

In this scenario, La Via Campesina's argument for food sovereignty in terms of 'the right of each nation' (and of deficit nations in particular) to seek self-sufficiency, resonates. But how will food deficit regions, especially those most vulnerable to adverse climate change – namely South Asia and sub-Saharan Africa – move towards sufficiency?

It is important to recognize at the onset that not every nation can be self-reliant in food, given obvious restrictions imposed by limited arable land, irrigation water and other essential resources, especially in geographically small countries. Hence trade cannot be eliminated,<sup>3</sup> nor would it be desirable to do so, given the ecological, climatic and other location specificities that make some crop division of global production beneficial. But let us consider a more limited goal, namely of countries seeking to raise food production to their best capacity. For increasing production, two contrasting models are being mooted globally with divergent visions of agrarian transitions. One vision privileges large corporate farms feeding a growing number of city dwellers. The other envisions the vast body of small and marginal farmers enhancing their productivity and making a smooth transition from agriculture to non-agriculture, or choosing to stay in agriculture as an attractive livelihood option. La Via Campesina roots for the latter. But there can be many difficulties in realizing this idea.

<sup>&</sup>lt;sup>1</sup>The figures for all cereals were obtained directly from Ramesh Chand, Director, National Centre for Agricultural Economics and Policy (Delhi), and those relating to maize from Chand (2009).

<sup>&</sup>lt;sup>2</sup>For an elaboration of these arguments, see Agarwal (2011).

<sup>&</sup>lt;sup>3</sup>See also, Burnett and Murphy (2013).

Table 1. Estimated climate change effect on 2050 crop production relative to no climate change effect (percentage difference).

Region	Rice	Wheat	Maize
South Asia	-14.5	-48.8	-8.9
East Asia and Pacific	-11.3	1.8	8.9
Sub-Saharan Africa	-15.2	-35.8	-7.1
Latin America	-19.2	17.4	-4.0
World	-13.5	-27.4	-0.4

Source: IFPRI (2009).

To begin with, as elaborated in the next section, there are supply side constraints in the ability of small farmers to raise production. The issue of gender is linked with these constraints given the growing feminization of agriculture and the specific problems that women farmers face. Moreover, nations seeking self-sufficiency have to cater to the needs of all their citizens, including those who are working in the non-farm sector (rural or urban) or as landless agricultural labourers. This means that food producers need to go beyond self-sufficiency to producing a surplus. As elaborated in Section 4, however, those who are currently in farming, if given a choice, may choose not to grow food crops at all. But consider first the constraints to increasing production and the interconnected issue of gender.

#### 3. The small farmer and her constraints

The majority of farmers in developing countries are small, often marginal, and increasingly women. And most are trapped in low productivity cycles. This is especially so in Asia and Africa where almost 60 percent of the workforce remains in agriculture, although agriculture's contribution to GDP is under 10 percent in Asia and under 20 percent in Africa. This divergence between agriculture's GDP contribution and the population it supports means that many remain dependent on low yield, subsistence farming.

And this trap is gendered, given women's disproportionate dependence on agriculture for their livelihood. In Asia, for example, in 2008, 57 percent of female workers relative to 48 percent of male workers depended on agriculture-related livelihoods. In Africa, these percentages were 63 and 48 respectively. Women also constitute a substantial proportion of the *total* agricultural workforce. In Asia, 43 percent of all farm workers in 2008 were female, with percentages close to 50 in many countries (Table 2). In the world's major rice producing and exporting countries, therefore, almost half the agricultural workforce is female. In Africa, again, almost 50 percent of agricultural workers are women. Further, aggregating the time spent on producing, processing and preparing food, women are estimated to contribute 60–70 percent of the total labour needed to bring food to the table in large parts of sub-Saharan Africa, India and China (Doss 2010, 9).

Moreover, over the past 40 years, across the world (with the exception of Europe) women workers have been rising as a proportion of the total agricultural workforce, since more men than women have moved to non-farm jobs (Figure 2). In effect, we are seeing a feminization of agriculture (namely, a rise in the proportion of women in the total agricultural workforce, even if the absolute proportion remains half or below).

Small farmers and especially women farmers thus have a central role to play in reviving agriculture and increasing its capacity to withstand the onslaughts of climate change. But they also face substantial constraints – insecure rights in the land they cultivate; lack of an assured

Region/Country	1971	1981	1991	2001	2005	2008
South-East Asia						
Cambodia	52.7	57.7	55.5	54.0	52.3	51.6
Indonesia	30.0	33.9	38.9	38.9	39.2	39.2
Lao People's Democratic Republic	48.1	51.4	51.3	52.1	52.6	52.5
Malaysia	38.6	41.1	31.3	25.6	23.3	21.9
Philippines	23.0	27.5	24.2	24.9	24.3	24.0
Thailand	49.9	49.2	47.3	46.1	46.0	45.3
Viet Nam	47.4	50.7	51.1	50.3	49.8	49.4
South Asia						
Bangladesh	42.9	42.8	45.7	46.2	48.3	50.0
Bhutan	39.7	25.9	22.6	24.4	30.0	34.2
India	39.3	32.3	32.5	32.3	$39.7^{a}$	39.7 <sup>a</sup>
Nepal	41.5	35.4	39.9	44.3	46.6	47.6
Pakistan	29.9	17.0	19.4	22.6	26.1	28.3
Sri Lanka	20.2	34.6	36.4	34.6	36.1	37.2

Table 2. Percentage of females in the total agricultural labour force: Asian countries.

45.8

40.9

47.3

42.3

47.9

42.4

48.0

42.6

48.0

42.6

Sources: Calculations based on FAO Statistics (http://faostat.fao.org), except for 2005 and 2008 for India.

44.3

41.9

East Asia

China

Asia

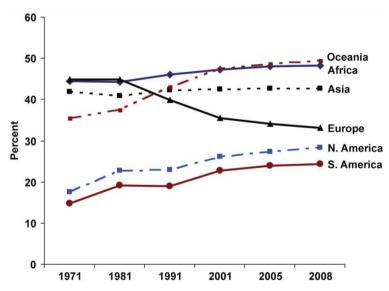


Figure 2. Percentage of females in the total agricultural labour force: world's regions. Source: Based on FAO Statistics (http://faostat.fao.org). Also reproduced in Agarwal (2013).

water supply; little access to formal credit; and limited access to inputs such as fertilizers, or to technology, information on new agricultural practices and marketing infrastructure.<sup>4</sup>

<sup>&</sup>lt;sup>a</sup>Figures for India for these two years have been calculated from the 2004–2005 National Sample Survey data (NSSO 2005a) and population projections given in GoI (2006).

<sup>&</sup>lt;sup>4</sup>See World Bank (2007) for a global picture, and GoI (2011), for India.

These constraints affect small farmers of both genders. But women face additional difficulties. The vast proportion of them own little or no land themselves in developing countries.<sup>5</sup> Most of them therefore work as unpaid labour on family farms owned by male relatives, or as labourers on the fields of others, or under insecure tenure arrangements on land obtained through male family members or markets (World Bank 2007, 80). In Nepal, in 2001, women owned land in only 14 percent of landowning rural households (Allendorf 2007). In India, in 2010–2011 women held 12.8 percent of all operational (that is, cultivated) land holdings, which constituted only 10.4 percent of the cultivated area (GoI 2010-11). In rural China, in the early 2000s, women constituted an estimated 70 percent of the effectively landless, since they usually failed to receive allotments of community land under the household responsibility system, when they relocated upon marriage or divorce (Li 2003, 4). Recent legal changes have further reduced the chances of such allotments. Within Asia as a whole, the gender gap in access to land is much greater in South Asia than in Southeast Asia; and within South Asia it is greater in the northern belt (e.g. northwest India, Bangladesh and Pakistan), than in the southern (e.g. south India and Sri Lanka). Laws, culture, religion, ecology, and cropping patterns all contribute to this geographic variation (Agarwal 1994). For instance, women are found to be much more visibly involved in rice and millet cultivation than in wheat.

Similarly, Africa reveals substantial gender gaps in access to land. In Kenya, women constitute 5 percent of registered landholders. In Ghana, women hold land in 10 percent of the households and men in 16–23 percent (Deere and Doss 2006). Latin America does relatively better, but is still far from gender equal in land ownership (Deere and de Leon 2001, Lastarria-Cornhiel and Manji 2010). Moreover, even when women have access to land, their control over it in terms of rights to lease, mortgage, or sell it, or use it as collateral tends to be more restricted than men's (Agarwal 1994, Saito et al. 1994). Household surveys, compiled by the FAO (2011, 23) for 20 countries, also show that male-headed households (MHHs) operate much larger farms on average than femaleheaded households (FHHs).

In addition, women farmers face well-documented gender inequalities and male bias in accessing the range of essential inputs and services mentioned earlier. Members of rural cooperatives providing inputs are predominantly men in most countries (see Saito et al. 1994, among others). Women farmers are also less likely to own agricultural tools than male farmers (Saito et al. 1994, 23, Peterman et al. 2009, 28). In addition, their public participation and mobility is socially restricted in many countries. This limits their ability to procure inputs or labour, or sell their produce profitably (Agarwal 1994, World Bank 2009, FAO 2011).

Constraints in access to land, inputs and technical support systems can significantly affect the productivity of all small and marginal farmers, but especially of women farmers given the gendered constraints. For instance, in sub-Saharan Africa where men and women often cultivate both separate and joint plots, the majority of the 22 studies that I examined, which measured productivity differences between male and female farmers, found lower yields on women's plots/farms (see Agarwal 2013 for details),

<sup>&</sup>lt;sup>5</sup>Although few countries collect country-level gender-disaggregated data on land or asset ownership, information gleaned from those that do, and from small-scale studies in others, shows a substantial gender inequality.

<sup>&</sup>lt;sup>6</sup>See World Bank (2009), FAO (2011), and Peterman et al. (2009) for global information; and Doss (2001) for Africa.

while a few found no statistically significant difference in yields or overall output. The studies showing lower yields for women attribute this variously to women's insecure land rights or their lower access to inputs (especially fertilizers), male labour, oxen or extension services. A few studies also show that women would have higher outputs than male farmers, if they had access to the same inputs and extension services as men. Based on a wide review of evidence for Kenya, Quisumbing (1996) concluded that women's crop yields could have been raised by up to 23 percent if their access to production inputs and experience had been the same as men's. In Burkina Faso, Udry et al. (1995) estimated that output could be increased by 10–15 percent if inputs such as manure and fertilizers were reallocated from men's plots to women's plots in the same household.

Beyond individual countries, FAO's 2011 State of Food and Agriculture Report has assessed that reducing the constraints faced by women farmers could raise yields on their farms by 20–30 percent and raise total agricultural output in developing countries by 2.5–4 percent, thus making a significant impact on national food availability (FAO 2011). A failure to bridge the gender gaps in access to inputs and services, however, would not only confine a large proportion of farmers to low productivity agriculture, it would also impact adversely on national efforts to attain food security.

What does this imply for the food sovereignty discussion? First, in order to increase national food output based on small-holder agriculture, most developing countries will require serious efforts to enable small farmers (and especially the rising proportion of women farmers) to overcome their production constraints. The food sovereignty movement thus needs to focus much more than it appears to have done on how these constraints which often vary by country and context - can be overcome. Second, the Nyéléni declaration argues for gender equality and a recognition of women's roles and rights in food production, as well as women's representation in decision-making. At the same time, it gives centre stage to the 'family farm'. This emphasis is problematic on several counts. To begin with, given that male members have shifted disproportionately either to cities or to non-farm jobs within rural areas, many family farms are effectively managed by women, but most (as noted) have no direct rights over the land or other assets. More particularly, family farms do not provide autonomy to women workers or the means to realize their potential as farmers. Hence a nod toward gender equality is not enough. The problems women face as farmers are structural and deep-rooted, and would need to be addressed specifically. This would include redistributing productive assets such as land and inputs within peasant households in gender-equal ways, and directing state services to cater better to the needs of women farmers, such as services relating to credit, extension, training, information on new technology, field trials, input supply, storage and marketing. Institutional innovations involving only women rather than entire families, as discussed in Section 5 of this paper, could also hold potential gains, both in terms of productivity and equity. But to achieve this would require a much more complex approach to production, gender and the state than is to be found so far in La Via Campesina's elaborations.

<sup>&</sup>lt;sup>7</sup>These were studies by Adesina and Djato (1997), Adeleke et al. (2008), Kumase et al. (2008), Moock (1976), Bindlish, Evenson and Gbetibouo (1993), Quisumbing et al. (2001) and Hill and Vigneri (2009).

<sup>&</sup>lt;sup>8</sup>See Kumase et al. (2008), Moock (1976), Dey (1992) and Udry et al. (1995).

<sup>&</sup>lt;sup>9</sup>I have focused on crops, but the argument that improving women's resource access can increase output could also be extended to other types of food, such as fish.

Moreover, achieving national self-reliance in food availability depends not only on overcoming small farmer production constraints. It also depends on what the farmers choose to do.

#### 4. The right of democratic choice

The food sovereignty vision gives considerable weight to democratic choice and debate. Of course all choices can be structurally constrained by the economic, political and social limitations within which they are exercised. Nevertheless, the 2002 definition (as noted above) at least allows scope for individual choice, recognizing that people can be self-sufficient *to the extent they wish to be*. The 2007 definition, however, focuses more on collective processes of democratic deliberation and consensus building. Both issues – consensus building and individual choice – are little addressed in practice.

None would deny the merit of democratic deliberation. But this would require more than information, persuasion and argument. A key question is: how would inequalities based on gender, ethnicity and class be addressed? La Via Campesina is constituted of an estimated 148 member organizations across 69 countries (Martinez-Torres and Rosset 2010, 165). Its members are heterogeneous on all the mentioned counts, as well as ideologically (Borras 2008). In particular, the landless and near-landless are not well represented even in Brazil, where the movement is strong. In India, the Karnataka State Farmers Association – the most visible face of La Via Campesina in South Asia – is constituted of well-off farmers who have resisted redistributive land reform and other measures that could benefit the landless and near-landless. The latter therefore do not see the organization as representing their interests (Borras 2008). There is also rather little integration between La Via Campesina and the many other global movements that address the interests of particular constituents of the rural working classes. Hence, notwithstanding the commonality across difference which clearly exists and keeps the movement alive, it is valid to ask: is it possible to build consensus among such disparate constituents?

Moreover, what if a significant proportion of farmers make choices (admittedly within the constraints they face) that diverge notably from those desired by the food sovereignty movement for a presumed common good? There are farmers who may be disillusioned with farming itself, or be compelled for reasons of economic viability to eschew food production for self-sufficiency. Do they have a democratic right to choose what they have reason to value?<sup>11</sup>

By way of illustration, consider some examples from India. In 2003, a nationwide survey carried out by the Government of India (NSSO 2005b) of 51,770 farm households (0.286 million persons) living in 6638 villages found that some 40 percent of them did not like farming, and given a choice, would prefer another source of livelihood. The question

<sup>&</sup>lt;sup>10</sup>La Via Campesina is only one (albeit one of the best known today) of many transnational agrarian movements that have emerged in recent decades, representing a diverse constituency of peasants, small farmers, consumers and producers, concerned variously with food politics, land and related issues (for a useful overview of such movements, see especially Borras et al. 2008).

<sup>&</sup>lt;sup>11</sup>For an elaboration on human capability, defined in terms of the freedom to choose what a person has reason to value, see Sen (1999).

<sup>12</sup>The total sample is slightly smaller when we exclude missing information, and also apply the defi-

<sup>&</sup>lt;sup>12</sup>The total sample is slightly smaller when we exclude missing information, and also apply the definition of 'farmer' strictly to exclude those who are not cultivating any land even if they own some, or are landless and not leasing in land in the year of the survey. This corrected sample has been used for Tables 3, 4 and 5.

Farm size (operated area)	Like farming	Don't like farming	All farmers
(hectares)	(N=30,294)	(N=21,075)	(N= 51,369)
$>0.0 - \le 1.0$	60.5	76.1	66.9
$>1.0 - \le 2.0$	19.0	13.8	16.9
>2.0	20.5	10.1	16.2
Total	100.0	100.0	100.0

Table 3. Attitudes towards farming by farm size.

Source: B. Agarwal and A. Agrawal, 'Choosing' not to farm?, ongoing analysis.

they were asked was: 'Do you like farming as a profession?' The survey defined a farmer as someone who not only operated some land but was engaged in agricultural activities during the 365 days preceding the day of the survey. Landless agricultural labourers who were not leasing in land and those owning but not cultivating land were excluded. A farm household was defined as one where at least one of its members was cultivating. Agricultural activities included crop cultivation, animal husbandry, poultry, fishing and sericulture.

Who were the farmers who did not like farming?<sup>13</sup> Some 76 percent of them operated one hectare (ha) or less. Their average operated area was 0.9 ha and average owned area was 0.8 ha, compared with 1.4 ha and 1. 3 ha respectively of those who said they liked farming (Table 3). Those disliking farming were also less likely to be aware of government measures such as minimum support prices; have crop insurance; be members in a farmers' organization or a self-help group (SHG); know about bio-fertilizers; or come from a household where at least one household member was a graduate or had had formal training in agriculture (Table 4). This suggests that the most vulnerable and resource poor are the most likely to want to leave agriculture.

The survey also asked those who said they did not like farming to select from four possible reasons for their view – low profitability, riskiness, low social status and 'other'. The respondents opted mainly for low profitability (two-thirds mentioned this) and the risk involved in the occupation (one-fifth said this) – profitability being more of an issue for the farmers cultivating 1 ha or less than with those cultivating over 2 ha (Table 5). Farmers in a higher farm size group (>2 ha) were somewhat more likely to mention risk and less likely to mention profitability, compared with the lowest farm size category of 1 ha or less, but the differences across land size groups were not dramatic. It is likely that the farmers would have given different responses if farming were more profitable and less risk-prone, or if they were less resource constrained.

Beyond the survey, there is also considerable evidence that farmers when faced with difficult economic choices do not want to undertake food production. In my ongoing research on women's group farming in Andhra Pradesh (discussed in more detail in the next section), for instance, I found that a number of women's group farms had stopped cultivating collectively. An important reason was the mandate by the local quasi-NGO, which had catalysed group formation, that the women should grow food crops in order to enhance household food security (not dissimilar to the food sovereignty approach). But food crops often failed due to lack of irrigation under drought conditions. The women's groups wanted to cultivate non-food crops, especially cotton, and many among them who were also doing

<sup>&</sup>lt;sup>13</sup>The results presented here are part of an ongoing analysis by the author and a colleague, Ankush Agrawal.

Table 4. Characteristics of farm households liking/not liking farming.

Characteristics of farm households	Like farming	Don't like farming	All farmers
Average area operated (ha)	1.41	0.89	1.20
Average area owned (ha)	1.27	0.79	1.08
Percentages			
Aware of minimum support price	32.0	24.9	29.1
Have crop insurance	4.5	2.7	3.8
Are members of a farmers' organization	2.7	1.9	2.4
Are members of a Self Help Group	6.4	4.1	5.4
Are aware of bio-fertilizers	22.9	17.4	20.7
At least one household member is a graduate	36.2	31.7	34.4
At least one household member has formal training in agriculture	3.4	2.1	2.9

Source: B. Agarwal and A. Agrawal, 'Choosing' not to farm?, ongoing analysis.

Table 5. Reasons for not liking farming by farm size.

	Reasons for not liking farming (%)				
Farm size (operated area: ha)	Not profitable	Risky	Social status	Other	All
>0.0 − ≤ 1.0	67.2	17.8	5.2	9.8	100.0
$>1.0 - \le 2.0$	65.5	22.1	6.0	6.4	100.0
>2.0	60.3	26.8	5.0	7.9	100.0
Total	66.2	19.3	5.3	9.1	100.0

Source: B. Agarwal and A. Agrawal, 'Choosing' not to farm?, ongoing analysis.

family farming alongside were growing cotton on their family plots. Restricted to food crops under group cultivation, some had stopped group activity altogether when the crop failed. The potential profit from farming was also a consideration. The groups needed cash to pay for the high cash rents on the land they leased in. Some illustrative voices from Karimnagar district (Andhra Pradesh) are given below, based on interviews conducted in 2013 with groups that had not undertaken collective farming for the last two years:

We want more profits from agriculture. The MS (NGO) staff restricted us to food crops. Because there were no rains for a third year running we only cultivated pulses in 2 acres, but got no yield. Then we decided to do individual farming with cotton which allows us to get a profit even when rains are scarce. All of us have taken land on lease and are cultivating cotton now. (Women's group farm, village 1)

We did want to continue with group farming, but we have to pay a high lease rate for the land. The land owners are demanding Rs. 15,000 per acre without irrigation facilities. For maize cultivation we need water. We lost the maize crop entirely due to the drought. Cotton would have given us some profit even under drought conditions, but MS [the NGO] insisted we cultivate only food crops. If they permit us to cultivate cotton we could still do group farming, since we can then recover the cost of investment and the lease paid. (Women's group farm, village 2)

<sup>&</sup>lt;sup>14</sup>Although this was not the only reason for the groups becoming inactive – sometimes intra-group conflicts also led to a breakup – but the lack of freedom to grow non-food crops was identified as the main reason in this region.

Investment in agriculture has increased but profits from food crops are low. MS will not let us cultivate cotton which is viable on this land, so we are no longer interested in continuing with group farming. (Women's group farm, village 3)

We are interested in group farming but we are not interested in growing food crops. If MS allowed us, we would like to cultivate flowers as a group, as there is much demand for flowers in the market. (Women's group farm, village 4)

There is also a popular assumption that women prefer to cultivate food crops. Examples such as those above, as well as those from other regions such as parts of sub-Saharan Africa where women are successfully cultivating commercial crops like cocoa, indicate that this is a misplaced assumption. Food security does not necessarily need food self-sufficiency at the local or household level. Landless rural dwellers and most urban dwellers buy food and have no means to grow their own. For them, a living wage is what matters for food security. Moreover, *nutritional* health depends not only on the quantity of foodgrains consumed and their diversity, but also on other nutritious food items, which cannot all be grown for self-consumption, as well as access to adequate and clean cooking fuel, clean water, sanitation, etc.

The issue of non-chemical farming (undoubtedly desirable both environmentally and for consumer health) is again complex and not everyone's choice. In India, for instance, according to the 2013 statistics from the *World of Organic Agriculture*, only 0.6 percent of agricultural land is under certified organic production, despite policies in many states to promote low chemical farming. <sup>16</sup> Of course these figures are likely to be a gross underestimate of organic farming per se, in that the vast proportion of Indian farmers are organic *by default* rather than by choice, since they cannot afford to buy chemical inputs. Comparable figures on agricultural land under certified organic production are 0.36 percent in China, 0.27 percent in Brazil and 19.6 percent in Austria (which is the highest percentage in Europe).

Choosing not to farm for self-sufficiency, choosing not to grow food crops, choosing not to grow organically – these are all democratic choices, subject to the constraints that farmers face. There can thus be a serious conflict between the aims of the food sovereignty movement and what many farmers may choose to do.

#### 5. Cooperation and collectivities

Consider now the issue of collective versus individual rights. In his elaboration on the Nyéléni declaration, Paul Nicholson notes (Wittman 2009, 679): '... we hold collective rights above an individual ownership model of land.' It is not clear, however, what this would mean in practice. The tension between individual and collective rights could potentially be serious. How would individual ownership be converted into collective rights? The process of socialist collectivization has been widely eschewed for its high human and production costs. The food sovereignty movement, however, provides no clear pathways or alternatives.

Alternatives do exist, however. As will be discussed below, voluntary cooperation to constitute collectivities could be one way forward for smallholders to overcome their supply constraints. The institutional forms I discuss here are a far cry from the idea of

<sup>&</sup>lt;sup>15</sup>Also see Whitehead (2005) on the complex crop division of labour by gender in sub-Saharan Africa. <sup>16</sup>See FIBL & IFOAM (2013), and Bhattacharyya and Chakroborty (2005, 116). For additional discussion, see also Willer and Yussefi (2007).

Table 6. Levels and nature of cooperation: a typology.

Level of cooperation	Nature of cooperation	Illustrative examples <sup>a</sup>
Single purpose minimal cooperation	Membership in cooperatives or producer companies for marketing or input purchase, but individual cultivation	Many countries globally, including both developing and developed economies
Single purpose medium cooperation	Joint investment in private irrigation or large machinery, but individual cultivation	India (in many states) France and Canada: CUMA (cooperatives for the use of agricultural equipment) Cuba
Multipurpose limited cooperation	Collective crop planning, purchase of inputs and sale of outputs, but individual cultivation	India, Cuba <sup>b</sup>
Multipurpose comprehensive cooperation	Group farming: pooling privately owned or leased in land along with labour and capital, for joint cultivation, marketing, and profit sharing.	Current: India, France, Japan. Late 1990s, early 2000s: the transition economies of Romania, Kyrgyzstan, East Germany, and Nicaragua

<sup>&</sup>lt;sup>a</sup>These examples are only illustrative. There could also be cases in other countries.

collective *ownership* of a major resource such as land. In fact, individual rights can live comfortably with collective approaches through a voluntary pooling of private resources for production, without forfeiting ownership. But this would involve moving beyond the model of individual family farming which the food sovereignty movement has been emphasizing.

Potentially, a group approach to agricultural production can take many forms, involving varying degrees of cooperation and benefits (see typology in Table 6). Single purpose cooperation at the end of the production process, such as for marketing, is common and can be found in many regions and countries through various types of collective arrangements. But marketing cooperatives with individual production involve little everyday cooperation. A somewhat higher level of cooperation is involved in jointly investing in movable machinery such as tractors and combine harvesters, or immovables such as irrigation wells. In fact, joint investment in irrigation wells by small farmers goes back historically a century or more in South Asia (see, for example, Darling 1947, Goyal 1966), and has taken new forms in recent decades. For instance, in the late 1980s, during my fieldwork in a village in India's Alwar district, Rajasthan, I found many farmers who despite owning small and scattered plots had been able to irrigate them fully, by investing in tubewells in groups of eight where their plots were located. As one such farmer who owned 75 cents of land in three fragments located in different parts of the village told me – I now own three-eighths of a tubewell! Investing in a tubewell would not have been affordable or efficient for such farmers on an individual basis. Another variation on this is machine cooperatives, which invest in large machines that can be hired by farmers – examples can be found in countries as diverse as Canada, France, Cuba and India. Joint crop planning and pooling finances to buy inputs, machinery and crop insurance (what I term multipurpose limited cooperation in Table 6) is also beginning to emerge through the support of NGOs or quasi-NGOs in parts of India. Such collective planning can also take account of local ecology in deciding on

<sup>&</sup>lt;sup>b</sup>These are outside the context of collectives and are constituted of peasant families who own their farms, cultivate separately, but cooperate in sharing farm machinery, obtaining credit and marketing their crops. Source: Bina Agarwal, ongoing research.

cropping patterns. More generally, operating in groups can improve small farmers' bargaining power with government agencies and so increase their access to formal credit, inputs and information (Braverman et al. 1991).

However, the most integrated form of cooperation, with the potential for most benefit in terms of productivity and social empowerment, involves the pooling of land (owned or leased in), labour and capital. Potentially, this can bring economies of scale; spread the risks of farming among a larger number; facilitate crop experimentation and diversification; add to the pool of knowledge and managerial skills; and help individual families overcome peak labour shortages by increasing labour supply. Land consolidation alone can lead to substantial labour saving through a better division of tasks. We would also expect groups to be better cushioned for short-term shocks such as rising input prices, and to adapt more effectively to climate change since conserving soils, water and forests usually requires collective effort.

For women farmers, these economic advantages could prove particularly substantial since these women face the most constraints. Also, as a group it would be easier for them to overcome the social restrictions on public interaction and mobility that they face in many cultures. A critical mass of 25–30 percent women, for instance, is found to empower rural women in South Asia to participate more effectively in mixed gender groups, such as those managing local forests (Agarwal 2010a, 2010b).

Overall, therefore, as a group, we would expect small and marginal farmers to be better protected as producers. A range of examples of small farmer cooperation indicate that this could work in practice, at least in particular contexts, if not everywhere. We find both old and current examples of group farming with land pooling especially in Asia and Europe. France, for instance, has had a long tradition of farmers pooling their land and other resources to constitute group farms called GAECs (Groupements d'Exploitation en Commune). This was catalysed by a law passed by the State in 1962. Even today many thousand GAECs sustain and are attracting a new generation of farmers. There is also evidence of farmers coming together in small groups for cooperative farming after de-collectivization in East Germany (Mathijs and Swinnen 2001). In particular, my current research in South Asia and explorations in the transition economies of central Asia and Europe reveal a range of illustrative cases. In the latter regions the groups are constituted of families and in South Asia only of women (see Agarwal 2010c for details).

In several parts of Central Asia and Eastern Europe where the large collective farms of the 1950s–1970s were de-collectivized in the 1980s and 1990s, farmers could revert to individual family farming if they wished to. But not all chose to. Many farming families in Kyrgyzstan, Romania and East Germany, for instance, voluntarily formed new group enterprises (with friends, relatives or neighbours), by pooling their land, capital and labour to farm collectively in small groups on the restituted land, or in downsized former collectives. They did this to overcome scarcity of machinery and labour, or inadequate experience or skills in individual farm management. In the early 2000s, these group enterprises were found to be significantly more productive than individual family farms. <sup>19</sup> Since then the scene has been changing. For instance, my recent field visit in Kyrgyzstan (in July 2013) with Malcolm Childress (who was involved in the earlier study on that country) to a few

<sup>&</sup>lt;sup>17</sup>Land consolidation alone can lead to substantial labour saving (Foster and Rosenzweig 2010)

<sup>&</sup>lt;sup>18</sup>I am currently researching this.

<sup>&</sup>lt;sup>19</sup>See, for example, Sabates-Wheeler (2002); Sabates-Wheeler and Childress (2004), and Mathijs and Swinnen (2001). See also Agarwal (2010c) for a detailed discussion.

of the same enterprises as studied earlier, revealed shifts away from group to more individualized family farms. They mentioned difficulties faced in drought years, high taxes and fees imposed by the government on collectives, or internal conflicts. At the same time, the fact that the groups served an important transitional function and survived for several years is, in itself, of no small importance. And my planned follow-up research on the earlier groups could provide further insights on those that have sustained.

In South Asia we find a very different model. Here there are women-only groups catalysed by NGOs or local governments. In India, some initiatives date to the 1980s. In Andhra Pradesh (south India), for example, with support from the Deccan Development Society (DDS, an NGO), poor, low-caste women in drought-prone Medak district began to lease in or purchase land in groups of 5–15, through various government schemes that provided subsidized credit and/or grants for this purpose (Agarwal 2003, 2010c). They cultivated the land collectively, aiming to achieve food security in an environmentally friendly way, through organic farming and crop diversification. In fact DDS's Director, P.V. Satheesh, is a strong advocate of food sovereignty in India, <sup>20</sup> and has been at the forefront of a 'grow millet' campaign. <sup>21</sup>

In 2008, DDS's group leasing programme covered around 85 hectares in 26 villages. In addition, women's groups were cultivating about 225 ha of land that they had purchased in 21 villages using the government's land-cum-grant scheme. They could not have bought the land through their individual resources. The groups are formed voluntarily. Decision-making is democratic. All the women know each other and share field tasks and produce equitably. They plant multiple crops and crop varieties (using seeds they preserve). This reduces their risk of total crop failure and provides a balanced diet. The group members I interviewed in the late 1990s said that by working together they could overcome their production constraints, access government officials and enjoy flexibility in the use of their time. They also said they are better, although whether they are fully self-sufficient needs to be assessed.

A second example from India is again drawn from Andhra Pradesh. This was one of three states where group farming was catalysed in 2000 by the United Nations Development Programme and the Government of India (Burra, 2004). In Andhra, the programme was implemented locally with the help of the Andhra Pradesh Mahila Samatha Society (which runs the Education for Empowerment of Women programme of the government of India). In this five year project, start-up capital funds, implements and technical support were provided to the groups during the project period (one group was formed per project village). After project support ended in 2005, the groups continued to function in many villages under the umbrella of the Mahila Samatha Society. Today, about 250 of the original 500 groups are still active. Here, about 7500 women farmers from scheduled caste communities are farming in groups of around 15-20 women each.<sup>22</sup> In my ongoing research here I found that the land is typically taken on lease from one or more of the group members and somewhat more rarely from non-members. The groups were directed to cultivate only or mainly food crops to enhance family food security. As noted, some groups ceased to work together but many have sustained for some 13 years, although not all have farmed continuously every year. They have faced difficulties in

<sup>&</sup>lt;sup>20</sup>See, for example, Mazhar et al. (2007).

<sup>&</sup>lt;sup>21</sup>See, for example, http://www.thehindu.com/news/national/andhra-pradesh/from-pastapur-to-senegal-widening-the-network-of-millets/article5396601.ece

<sup>&</sup>lt;sup>22</sup>Figures provided in 2011 by the head of the Andhra Pradesh Mahila Samatha programme.

procuring land to lease as well as in obtaining inputs, but most of the groups report reaping some form of social and economic benefit.

Another notable example from India is the Kudumbashree programme, launched by the Government of Kerala to support landless and land-poor women lease land and undertake group farming. Since 2010, the Joint Liability Group (JLG) scheme of the National Bank for Agriculture and Rural Development (NABARD) has helped link the groups with subsidized credit and various economic incentives. An estimated 34,000 groups are leasing in land for group farming in all districts of the state. Here there are no external restrictions on which crops women can grow. Women choose crops based on ecology, profitability, consumption needs, and production incentives. In some parts of the state, they grow crops for both self-consumption and sale, but elsewhere they grow a range of crops (including vegetables and bananas) mainly for the market, choosing their markets (local or distant) based on transaction costs and prices.<sup>23</sup> Interestingly, unlike in Andhra Pradesh, there are fewer differences here in the crops grown by group farms and family farms. To the extent that the groups tend to grow mainly paddy while individual farmers more often grow vegetables, the women's choice is based primarily on the type of land they have and the availability of irrigation, as well as the economic incentives extended to them by the Kudumbashree Mission, rather than by mandate.<sup>24</sup>

These varied examples demonstrate the potential of small farmers (women and men) cooperating for overcoming their resource constraints. In the former socialist regimes, the cooperation is between farming families that receive little direct external support from the State. In South Asia the cooperation is between women from farming families, with support from the local government or NGOs. The gender implications of these efforts can be mixed. In inter-family cooperation there is no clear mechanism for tackling intra-family inequalities. In the women-only group farms there is a basis for women's empowerment outside the family structure, but women's claims on family land and labour for their collective efforts remain weak. Nevertheless, it is interesting that many groups (especially in Kerala) do receive support from the husbands of some of the women involved in finding land to lease, or in terms of technical advice and help in marketing their crops. In other words, women's group farming ventures are typically seen by spouses as bringing additional income or food in kind, rather than as conflicting with family farm production. In Kerala, the Kudumbashree programme has also brought many women into active work participation outside the home who were earlier involved mainly in domestic chores.

Of course group farming is not being suggested as a panacea, nor as the only possible alternative. But it is a model whose potential has received rather little attention as an alternative to the dominant model of individual family farms – an alternative that could help small farmers who are severely resource-constrained to find decent work and livelihoods in situations of economic and climate uncertainty. Certainly it is an alternative about which we hear little in the food sovereignty debates. This form of collective action (which I call 'cooperative collective action') is also more difficult to sustain, and is different from what I term 'agitational collective action' that is common to social movements (See also Agarwal,

<sup>&</sup>lt;sup>23</sup>See also Vorley et al. (2012) who uses examples from several countries to emphasize the need to recognize and enhance small farmers' agency, and understand how they negotiate a mix in global, national and local markets.

<sup>&</sup>lt;sup>24</sup>In Bangladesh too, we can find examples of women's groups leasing in land for joint cultivation (see IFAD 2009).

2000). Agitations are typically sporadic and situation-specific, such as for calling upon the State to implement redistributive land reform. In contrast, multipurpose cooperation in farming requires regular interaction, decision-making and monitoring. In a sense this is an institutional innovation that is needed in the *post*-agitation phase of a movement for, say, land rights.

In addition, there are at least three points of note in the ground examples of group farming cited above. First, the land (where individually owned) is not forfeited when the group is formed, in contrast to the collectives envisioned by La Via Campesina (as articulated by Paul Nicholson). Rather, farmers keep their individual rights but farm collectively. The land they farm can come from within the group or from outside it. Sometimes members keep part of their land for self-cultivation and pool a part.

Second, as outlined in Section 4, many of the women's groups (active and inactive) that I have been researching in Andhra Pradesh feel they would have been more productive (or less at risk) if they could have grown non-food crops such as cotton. For them, food security does not necessarily arise from growing their own food, but from having economic access to food, including through purchase. They give weight to higher incomes, rather than food self-sufficiency through production alone. This is also reflected in their growing cotton on many of their family farms. In other words, given a choice (within their resource constraints) they would have gone for commercial crops rather than subsistence food crops.

Moreover, very few of the 710 groups and individual farmers (including male farmers) interviewed in my survey in Andhra Pradesh and the approximately 250 interviewed in Kerala wanted their children to take up farming. Consistently, they preferred their children to be educated and take up other jobs. The idea of education for more lucrative farming found no place in their aspirations for the next generation.

Third, these initiatives did not arise from a global vision of what peasant economies should do or be. They arose out of local visions and institutional support systems. Groups that are free to choose what they grow and how, based on economic returns or any other objective they value, appear more likely to survive as a collectivity than those who have a particular vision of self-sufficiency imposed from above. The food sovereignty approach emphasizes horizontal rather than hierarchical interactions but, paradoxically, farmers with equal say may go their own way.

#### 6. Concluding comments

The La Via Campesina vision of food sovereignty, with its emphasis on food self-sufficiency, diversity, agroecology, community, democracy and equality is undeniably attractive and important, but some elements can also be in serious conflict with others in practice.

The goal of food self-sufficiency at the national level, for instance, has resonance as a means of reducing vulnerabilities arising from the over-dependency of food importing countries on food exporting ones. Much of the developing world depends on food imports from the developed world and a few developing countries for fulfilling its food needs. Given the uncertainties arising from such dependence, rising and volatile food prices, and the effects of climate change, national efforts to achieve some degree of food sufficiency and move towards low chemical, environmentally sustainable agriculture – both important cornerstones of the food sovereignty argument – clearly appear desirable, although not all countries can or may want to aim at full sufficiency.

But national self-sufficiency goals cannot translate simply into local or household self-sufficiency goals. Nations have to provide for all citizens, many of whom are in non-farm or

urban jobs, and farmers may not make choices that move a country towards food self-sufficiency. It is of course legitimate to argue that the choices farmers make are subject to the constraints they face and the alternatives before them. It is therefore important to identify those constraints – economic, institutional, technical, informational and political – and to reflect on alternatives, in particular on little discussed alternatives based on small farmer cooperation. But it is equally important to recognize that the valuable rights of voice and choice, exercised by the disadvantaged in local contexts, cannot always fall in line with preconceived trajectories defined by global movements on behalf of the disadvantaged. Therein lies the paradox.

In the agrarian transitions we are currently witnessing, an increasing proportion of small farmers (men more than women) are leaving agriculture; many others (of both genders) would like to do so; and most hope their children will find a future in another occupation. Among those who choose to stay, many would like to opt for commercially viable crops rather than subsistence crops; to use some chemicals rather than none; and to connect with a range of marketing outlets depending on the crops grown, the prices offered and the transaction costs incurred, rather than depend solely on local markets. Also, increasingly as countries urbanize, food security for millions will depend on their ability to buy food, rather than producing it themselves.

All this raises critical questions about the realistic nature of the food sovereignty vision. Undeniably, the vision is an important reminder of the environmental and other risks following the excesses of green revolution technology, and the need to build diversity, ecology and community, but the framework for this is far from clear. Group approaches based on voluntary cooperation and democratic principles, such as those discussed in this paper, could be a way forward. But these approaches are markedly different from former socialist collectives and are not built on Paul Nicolson/La Via Campesina's idea of collective land ownership. And they necessitate a shift away from the individual family farming model emphasized in the food sovereignty vision. Group approaches also require adaptation to context and support from governments and civil society.

The importance of contextual adaptation of any global vision raises issues of individual choice and democratic freedoms, which cannot simply be set aside. Here, significant challenges arise from questions such as: who represents the many? By what processes are decisions taken? And can institutions that promote voice and choice lead to a convergence of individual and collective priorities, or promote individual freedoms while defining collective responsibilities?

#### References

Adeleke, O.A., O.I. Adesiyan, O.A. Olaniyi, K.O. Adelalu, and H.M. Matanmi. 2008. Gender differentials in the productivity of cereal crop farmers: a case study of maize farmers in Oluyole Local Government Area of Oyo State. *Agricultural Journal*, 3(3), 193–198.

Adesina, A.A. and K.K. Djato. 1997. Relative efficiency of women as farm managers: Profit function analysis in Côte d'Ivoire. *Agricultural Economics*, 16(1), 47–53.

Agarwal, B. 1994. A field of one's own: Gender and land rights in South Asia. Cambridge: Cambridge University Press.

Agarwal, B. 2000. Conceptualising environmental collective action: Why gender matters. *Cambridge Journal of Economics*, 24, 283–310.

Agarwal, B. 2003. Gender and Land rights revisited: Exploring new prospects via the state, family and market. *Journal of Agrarian Change*, 3(1–2), 184–224.

Agarwal, B. 2010a. Gender and green governance: The political economy of women's presence within and beyond community forestry. Oxford: Oxford University Press.

- Agarwal, B. 2010b. Does women's proportional strength affect their participation? Governing local forests in South Asia. *World Development*, 38(1), 98–112.
- Agarwal, B. 2010c. Rethinking agricultural production collectivities. *Economic and Political Weekly*, 27 February, 55(9), 64–78.
- Agarwal, B. 2011. Food crises and gender inequality, Working Paper No 107, United Nations Department of Economic and Social Affairs, New York.
- Agarwal, B. 2013. Food security, productivity and gender inequality. In: R. Herring, ed. *Handbook of Food Politics and Society*. Accessible online. New York: Oxford University Press.
- Allendorf, K. 2007. Do women's land rights promote empowerment and child health in Nepal? *World Development*, 35(11), 1975–1988.
- Bhattacharyya, P. and G. Chakraborty. 2005. Current status of organic farming in India and other countries'. *Indian Journal of Fertilisers*, 1(9), 111–123.
- Bindlish, V., R. Evenson, and M. Gbetibouo. 1993. Evaluation of T and V-based extension in Burkina Faso, World Bank Technical Paper No. 226, Africa Technical Department Series, World Bank, Washington, DC.
- Borras, Jr., S.M. 2008. La Via Campesina and its global campaign for agrarian reform. *Journal of Agrarian Change*, 8(2 & 3), 258–289.
- Borras, Jr., S.M., M. Edelman, and C. Kay. 2008. Transnational agrarian movements: Origins and politics, campaigns and impact. *Journal of Agrarian Change*, 8(2&3), 169–204.
- Braverman, A., J.L. Guasch, M. Huppi, and L. Pohlmeier. 1991. Promoting rural cooperatives in developing countries, discussion Paper No. 121, World Bank, Washington DC.
- von Braun, J. 2008. Rising food prices: What should be done? Eurochoices, 7(2), 30–35.
- von Braun, J. 2008–09. Food-security risks must be comprehensively addressed, Annual Report Essay 2008–09, IFPRI, Washington, DC.
- Burnett, Kim and Sophia Murphy. 2013. What place for international trade in food sovereignty? Paper presented at the International conference on 'Food sovereignty: A critical dialogue' September 14–15, 2013, Yale University, New Haven, CT.
- Burra, N. 2004. Empowering women for household food security: UNDP's Experience, United Nations Development Programme, Delhi.
- Chand, R. 2009. Challenges to ensuring food security through wheat. CAB Reviews: Perspectives in Agriculture, *Veterinary Science, Nutrition and Natural Resources*, 4 (65): 1–13. See http://www.cabi.org/cabreviews.
- Darling, M.L. 1947. The Punjab peasant in prosperity and debt. Lahore: Vanguard Books.
- Deere, C.D. and Magdalena de Leon. 2001. *Empowering women: Land and property rights in Latin America*. Pittsburgh: University of Pittsburgh Press.
- Deere, C.D. and C.R. Doss. 2006. The gender asset gap: What do we know and why does it matter? *Feminist Economics*, 12(1–2), 1–50.
- Dey, J. 1992. Gender asymmetries in intra-household resource allocation in sub-Saharan Africa: Some policy implications for land and labour productivity', paper presented at an IFPRI workshop on Intra-household resource allocation.
- Doss, C.R. 2001. Designing agricultural technology for African women farmers: Lessons from 25 years of experience. *World Development*, 29(12), 2075–2092.
- Doss, C.R. 2010. If women hold up half the sky, how much of the world's food do they produce? Background paper, 2011 *State of Food and Agriculture Report (SOFA Report)*, FAO, Rome.
- FAO. 2011. The State of Food and Agriculture (SOFA Report). Rome: FAO.
- FIBL & IFOAM. 2013. *The World of Organic Agriculture*. Available from: http://www.organic-world.net/fileadmin/documents/yearbook/2013/web-fibl-ifoam-2013–318-321.pdf
- Foster, A.D. and M.R. Rosenzweig. 2010. Is there surplus labour in rural India, Discussion Paper No. 991, Economic Growth Centre, Yale University, New Haven.
- GoI. 2006. Census of India 2001: Population projections for India and States 2001–2026, Report of the technical group on population projections, National Commission on Population, GoI, Delhi.
- GoI (Government of India). 2010–11. *Agricultural Census 2010–11* All India Report on Number and Area of Operational Holdings, Agriculture Census Division, Department of Agriculture and Co-Operation, Ministry of Agriculture, New Delhi.
- Goyal, S.K. 1966. Cooperative farming in India. Bombay: Asia Publishing House.
- Hill, R.V. and M. Vigneri. 2009. Mainstreaming gender sensitivity in cash crop market supply chains, Background paper, 2011 *SOFA Report*. FAO, Rome.

- IFAD (International Fund for Agricultural Development). 2009. Evaluation: Bangladesh. Available from: www.ifad.org/evaluation/public\_html/eksyst/doc/country/pi/bangladesh/cesba94e\_3.htm. [Accessed 14 September 2009].
- IFPRI (International Food Policy Research Institute). 2009. Climate change: Impact on agriculture and costs of adaptation. Washington, DC: IFPRI.
- Ivanic, M. and W. Martin. 2008. Implications of higher global food prices for poverty in low-income countries, Policy Research Working Paper Series 4594, World Bank, Washington DC.
- Kumase, W.N., H. Bisseleua and S. Klasen. 2008. Opportunities and Constraints in Agriculture: A Gendered Analysis of Cocoa Production in Southern Cameroon, Discussion Paper No. 27. Courant Research Centre, University of Göttingen.
- Lastarria-Cornhiel, S. and A. Manji. 2010. Land Tenure, Land Policy, and Gender in Rural Areas, background paper, 2011 *SOFA Report*, FAO, Rome.
- Li, Z. 2003. Women's land tenure rights in rural China: A synthesis. Beijing: Mimeo, Ford Foundation.
- Martinez-Torres, M.E. and P.M. Rosset. 2010. La Via Campesina: The birth and evolution of á transnational social movement. *The Journal of Peasant Studies*, 37(1), 149–175.
- Mathijs, E. and J.F.M. Swinnen. 2001. Production organization and efficiency during transition: An empirical analysis of East German agriculture. *Review of Economics and Statistics*, 83(1), 100–107.
- Mazhar, F., D. Buckles, P.V. Satheesh, and F. Akhter. 2007. Food sovereignty and uncultivated biodiversity in South Asia. Ottawa: IDRC.
- Moock, P.R. 1976. The efficiency of women farm managers Kenya. *American Journal of Agricultural Economics*, 58(5), 831–835.
- NSSO (National Sample Survey Organisation). 2005a. *Employment and unemployment situation in India* (July 2004 June 2005), NSS 61th Round, NSSO, New Delhi: Government of India (GoI).
- NSSO. 2005b. Some aspects of farming: Situation assessment survey of farmers. New Delhi: Department of Statistics, Government of India.
- Patel, R. 2009. Grassroots voices: What does food sovereignty look like? *Journal of Peasant Studies*, 36(3), 663–706.
- Peterman, A., J. Behrman, and A.R. Quisumbing. 2009. A review of empirical evidence on gender differences in non-land agricultural inputs, technology and services in developing countries, background paper, 2011 SOFA Report, FAO, Rome.
- Quisumbing, A.R. 1996. Male-female differences in agricultural productivity: Methodological issues and empirical evidence. *World Development*, 24(10), 1579–1595.
- Quisumbing, A.R., Ellen Payongayong, J.B. Aidoo, and Keijiro Otsuka. 2001. Women's land rights in the transition to individualized ownership: Implications for the management of tree resources in Western Ghana. *Economic Development and CulturalChange*, 50(1), 157–182.
- Quisumbing, A.R., R.S. Meinzen-Dick, L. Bassett, M. Usnick, L. Pandolfelli, C. Morden, and H. Alderman. 2008. Helping women respond to the global food price crises, Policy Brief 7, IFPRI, Washington DC.
- 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, Working Paper 239, Institute of Development Studies, Sussex.
- Saito, K.A., H. Mekonnen, and D. Spurling. 1994. Raising the productivity of women farmers in sub-Saharan Africa, World Bank Discussion Papers, Africa Technical Department Series No. 230, World Bank, Washington DC.
- Sen, A.K. 1999. Development as freedom. New York: Knopf.
- Udry, C., J. Hoddinott, H. Alderman, and L. Haddad. 1995. Differentials in farm productivity: Implications for household efficiency and agricultural policy. *Food Policy*, 20(5), 407–423.
- Vorley, B., E. del Pozo-Vergnes, and A. Barnett. 2012. Small producer agency in the globalised market: making choices in a changing world, IIED/HIVOS. Downloaded from http://pubs.iied.org/16521IIED.html
- Wheeler, T. and J. von Braun. 2013. Climate change impacts on global food security. *Science*, 341, 508–513.

- Whitehead, A. 2005. The gendered impacts of liberalisation policies on African agricultural economies and rural livelihoods, background paper for UNRISD Report on gender equality: Striving for justice in an unequal world (Geneva: UNRISD).
- Willer, H. and M. Yussefi, eds. 2007. *The world of organic agriculture statistics and emerging trends*. Available from: http://www.orgprints.org/10506
- Wittman, H. 2009. Ínterview: Paul Nicholson, La Via Campesina. *The Journal of Peasant Studies*, 36 (3), 676–682.
- World Bank. 2007. World development report 2008: agriculture for development. Washington, DC: World Bank.
- World Bank. 2009. Gender in agriculture sourcebook. Vols 1 and 2. Washington, DC: World Bank.

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