Report of Sub-group on Gender and Agriculture

Sub Group Members

Prof. Maithreyi Krishnaraj Smt Deepa Jain Singh/Smt Snehlatha Kumar Shri A.K. Agarwal/Smt Neeraj Suneja Dr. Alka Parikh, **Prof Vibhuti Patel** Dr. K.S.P. Rao Ms. Mamta Shankar Prof. M.V. Rao

Shri R.K. Khanna

Ms. Yamini Mishra

Dr. Geetha Kuttv

Dr. K Uma Rani

Smt. Sneh Wadhwa

Smt. Manju Kumari

Dr. Hema Pandey

Prof. Amita Shah Member Secretary

Prof. Aasha Kapur Mehta Chairperson

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Working Group on

Gender Issues, Panchayat Raj Institutions, Public Private Partnership, **Innovative Finance and Micro Finance in Agriculture** For the Eleventh Five Year Plan (2007 – 2012)

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TOR Item 1: To undertake a critical review of the existing approach, strategies, priorities, institutional arrangements, on-going policies, access to resources (land including land rights, credit etc.), gender concerns in re-settlement of PAPs and empowerment of women in agriculture¹.

Issues and Recommendations:

Preamble

In view of the current agrarian crisis facing the country, it is important to recognize women's role in agriculture to ensure agricultural growth so as to a) eradicate poverty b) ensure food security for the majority and c) promote the well being of women themselves. Though they are part of farm households, women's role in agriculture necessitates special inputs from our policies and programmes.

1 The Context: The Agrarian Crisis

- **1.1** A very large proportion of our population depends on agriculture for survival. This sector provides livelihood to over 60% of India's population. Performance of the agricultural sector is key to livelihood and food security and this is especially the case for those subsisting below or near the poverty line. The deceleration in agricultural growth is therefore cause for concern.
- 1.2 The Tenth Plan had aimed to reverse the deceleration in agricultural growth and had targeted a rate of growth of agricultural GDP of 4 per cent per year. Achievements are far short of targets. The growth rate of agriculture was about 2 % during the Ninth Plan and is expected to decline to 1.8 % per annum during the Tenth Plan according to the Eleventh Plan Approach Paper. Farmers have suffered acute distress in several parts of the country for several reasons and farmers' suicides have occurred "on an unprecedented scale." As the Prime Minister stated in his address to the Agriculture Summit in October, 2006: "There is a crisis in agriculture in many regions of the country.....In many parts of the country, agriculture is being carried out in adverse conditions."

2 Women Farmers

¹ This section of the report was prepared by Aasha Kapur Mehta based on notes prepared by almost all members of the subgroup, recommendations presented to Planning Commission by the Civil Society Think Tank for Engendering the 11th Plan led by NAWO, the large number of people who responded to a request for information on the UN Solution Exchange, discussions at the meetings of the subgroup held at Planning Commission on 23rd September, 2006 and at Hyderabad at MANAGE on 18th October, 2006 and a partial review of the literature. Advice and inputs given by Maithreyi Krishnaraj are gratefully acknowledged. Planning Commission and MANAGE very kindly made arrangements for two meetings of the Sub Group. Efforts have been made to cite and acknowledge each input received. Any remaining omission in this regard is regretted.

- **1.1** The majority of farmers in India are marginal and small farmers of whom women dominate. Over 60% households own less than one hectare. Farmers owning over one hectare comprise about 28% of rural families. Since the majority of farmers are marginal and small farmers, the revised draft National Policy for Farmers has called for adequate investment and pro-small farmer public policies, to restore confidence in our agricultural capability. Hence, we must invest in processes that will empower farmers men and women with resource entitlement, support infrastructure and knowledge that will allow them to make informed choices.
- 1.2 Women today play a pivotal role in agriculture as female agricultural labour, as farmers, co-farmers, female family labour and (with male out-migration, widowhood, etc) as managers of farms and farm entrepreneurs. Three-fourths of women workers are in agriculture. Women work extensively in production of major grains and millets, in land preparation, seed selection and seedling production, sowing, applying manure, fertilizer and pesticide, weeding, transplanting, threshing, winnowing and harvesting; in livestock production, fish processing, collection of non-timber forest produce (NTFP) etc. In animal husbandry, women have multiple roles ranging from animal care, grazing, fodder collection and cleaning of animal sheds to processing of milk and livestock products. Keeping milch animals, small ruminants and backyard poultry is an important source of income for poor farm families and agricultural labourers. Landless women agricultural labourers play a pivotal role as they are involved in most of the agricultural operations. Landless women also lease in land for cultivation. The majority of workers involved in collection of non-timber forest produce (NTFP) are women, particularly tribal women. Women also augment family resources through tasks such as collection of fuel, fodder, drinking water and water for family members and domestic animals.²
- **1.3** While women have always played a key role in agricultural production, their importance both as workers and as managers of farms has been growing, as an increasing number of men move to non-farm jobs. Today 53% of all male workers but 75% of all female workers, and 85% of all *rural* female workers, are in agriculture. Women constitute 40% of the agricultural work force and this percentage is rising. An estimated 20 percent of rural households are <u>de facto</u> female headed, due to widowhood, desertion, or male out-migration.³

2 The Agrarian Crisis: Causes and Implications for Poverty

2.1 Women's lives are dependent on and intimately affected by the present state of agriculture. Addressing the extreme difficulties experienced by large numbers of women and men who work as agricultural labourers and farmers in many parts of the country needs urgent attention. The spate of farmers' suicides in several regions is a cause for serious concern. These have occurred due to ongoing policies that have led to a decline in public investment in agriculture and factors such as lack of adequate technical support; use of spurious seeds and pesticides; poor crop management; debt at very high interest rates; failure of investments in tubewells; and cheap imports due to high subsidies to foreign farmers (see Appendix 1.1)⁴.

- **2.2** As the Third Report of the National Commission on Farmers⁵ recognised: "Institutional support to small farmers is weak. The same is true of post-harvest infrastructure. For example, even now paddy is being spread on the roads for drying in many places. The spoilage losses can be as high as 30% in the case of vegetables and fruits. Institutions, which are supposed to help farmers, such as research, extension, credit and input supply agencies, are by and large not pro-poor and prowomen. Mechanisms for risk mitigation are poor or absent. Hardly 10% of farmers are covered by crop insurance. Farm families are also not covered by health insurance. There is no Agricultural Risk Fund. Both risk mitigation and price stabilization are receiving inadequate policy support. The cost of production is invariably higher than the minimum support price, due to ever-increasing prices of diesel and other inputs. Investment in agriculture has suffered a decline over the past two decades. Capital formation in agriculture and allied sectors in relation to GDP started declining in the 1980s and is only now being reversed. This has adversely affected irrigation and rural infrastructure development. An unfortunate consequence of the constellation of hardships faced by small farm families is the growing number of suicides among farmers. The situation is particularly alarming in parts of Vidharba of Maharashtra State."
- **2.3** There synergies between micro credit are strong insurance, micro and micro savings. Insurance offers protection to assets created under credit programmes, and protects savings from factors like sickness, death, accidents or asset loss due to fire, drought, floods, etc. Amongst the poor, sickness is the most frequent and most expensive risk, which leads to loss of daily income and more indebtedness which push the rural poor back into poverty. Crop failure and disease related loss of cattle, are other major risks in rural India. Micro credit providers can evolve insurance mechanisms where they can deduct premia, while extending loans, or adding small monthly contributions towards premia in periodic loan repayment installments.6
- **2.4** The present agricultural distress has serious implications in the context of poverty. Since the suicides are the result of losses and distress suffered by land owning farmers (and not assetless poor) the numbers of those entering poverty is likely to increase. Further, since much of the agricultural distress has occurred in states and districts that are not among the most chronically and multi-dimensionally deprived this does not auger well for efforts at reducing poverty. Women are especially affected as they constitute a disproportionate number of the poor and especially of the chronically poor. 8

2.5 Recommendations for easing the impact of the agrarian crisis and poverty of farmers:

a. Provide strong extension and technical support in the context of crop management practices. For effective outreach ensure adequate trained staff,

- with access of women who should participate in determining the training and extension agenda;
- b. Establish an independent regulatory authority which should be required to regulate, test and certify quality of inputs eg seeds;
- c. All crops should be covered by crop insurance and insurance relief should be immediate, with the village as the unit for assessment;
- d. Significantly increase public investment in agricultural infrastructure especially to ensure access to water for agriculture;
- e. Provide access to credit at reasonable rates of interest:
- f. Protect farmers from competition due to subsidized cheap imports;
- g. Conduct a census of farmers who have committed suicide and design rehabilitation schemes, particularly for women and children in affected families:
- h. Waive the pending loans/debt against small and marginal farmers;
- i. Address the special needs of women cultivating waste land and women in dry land farming;
- j. Challenge patents on seeds;
- k. Promote sprinkler and drip irrigation;
- 1. Increase budgetary allocation for rain water harvesting;
- m. Use NREGA to recover marginal lands belonging to the poor;
- n. Evolve a social safety network for farm women and men to offset the adverse impact of globalisation of agriculture on women;
- o. Create an Agricultural Risk Fund as several areas in the country have recurrent and frequent drought/floods etc, which cripple the incomes of the farmers. Rescheduling and restructuring of their loans are not enough in the event of successive natural calamities.

3 Agricultural Growth and Productivity

If we are to meet agricultural growth targets, agricultural productivity must increase. This will require scientific knowledge based farming or use of scientific agronomic practices based on bridging the gap between knowledge of farmers and scientists.

With the potential for irrigation reaching near stagnation and the ground water table depleting rapidly, the next round of growth in agriculture will have to come from rain fed agriculture. Setting up of the Rain fed Area Authority is a recognition of the inevitability of such a shift. While the rain fed parts of Indian agriculture are the weakest, they contain the greatest untapped potential for growth. Incidentally these are also the regions with high incidence of poverty. Hence shifting the locus of agricultural growth may also have significant impact on poverty reduction. Promoting agricultural growth through productivity enhancement in these hitherto lagging regions will necessitate location specific technology development, local institutions for developing and marketing bioinputs, and price support that ensures viability of low water intensive products like coarse cereals, medicinal and other plantation, and crops with greater fodder value.⁹

On the positive side, the shift in the approach for promoting agricultural growth will create opportunities for diversification in areas where women already have larger

presence. Development of wasteland, pastures and livestock, inland fishery, plantation and collection of NTFPs are examples of the expanding opportunities that are growth inducing, environmentally sustainable and gender equitable. It is towards this vision that the next phase of agricultural growth needs to move.

For attaining agricultural growth we need to give attention to the aspects discussed below.

- **3.1** Increase in agricultural productivity requires agricultural research that provides solutions to farmers location-specific problems based on soil and moisture conditions, methods of sowing, application of inputs, types and dosage of nutrients, pesticides, crop mix etc.¹⁰ All of this requires farmer and gender sensitive agricultural extension with village level demonstrations, and strong links between laboratories, scientists and extension workers.
- 3.2 Productivity gains will have to come from regions, which have not yet seen very high productivity, that is, the semi arid tropics. But here, water is the major constraint to any agricultural growth. Thus if we want to see further growth, the first priority will have to be accorded to water harvesting in the semi arid lands. We need to increase output per unit of land in rainfed areas and per unit of water. Providing for water supply is the most crucial requirement for agricultural growth. This will require increased emphasis on watershed development and water conservation techniques. Rice and wheat cannot be the sole engines of growth in future. Demand will rise most rapidly for non-foodgrains especially for dairy products, protein rich foods, fruits and vegetables, sugar and oils. These foods have higher value added than staple foodgrains, and they contribute to rising rural incomes...they also tend to be labour intensive not only in production, but also in handling and processing. 11
- 3.3 Allied activities: Livestock contributes 26% of the agricultural GDP. With about 440 million livestock heads distributed over 100 million households, livestock rearing forms an important livelihood activity supporting agriculture. Ownership of livestock is more egalitarian than the ownership of land since resource poor farmer families own a majority of cattle, buffalo, sheep and goats. But livestock economies are neglected. Women play a critical role in the care and management of livestock, but may not have ownership rights, and hence the cooperative model of production needs to be promoted. Women contribute 50 to 90% of labour inputs required for the day to day care and management of livestock but livestock development, training and extension programmes are designed primarily for men. 14
- **3.4** Both coastal and inland **fisheries** provide employment and livelihood opportunities to millions of families. There is considerable scope for improving the income of fisher-families on an environmentally sustainable basis.

- **3.5** Investment in agriculture and its infrastructure has to be strengthened. However it is not the magnitude of investment but its contribution to production capacity that is important. With the scope for expanding area being exhausted and the scope for further expansion of irrigation getting diminished, the institutional barrier (comprising governance, the quality of public systems, and economic policies) is the impediment to agricultural growth. ¹⁵
- **3.6 Horticulture** offers special opportunity for high valued agriculture in different agroecological regions viz, dry land, coastal and mountain. Horticulture is also more labour intensive than many of the crops grown in dry land regions. It is estimated that about 80 per cent of the farmers involved in fruit cultivation belong to the categories of small and marginal whereas 90 per cent of vegetable growers come from these categories of farmers. To an extent, predominance of small farmers in the sub-sector poses special challenges in terms of putting appropriate support system in place. The major challenge is the presence of old and senile orchards/plantation with poor management practices, long gestation period, and high capital cost in setting up new plantation. All these indicate the need for special efforts for extending credit, technology and marketing support to a large number of small producers in different parts of the country. Efforts are also needed to consolidate production units so as to be able to put up cost effective systems for transportation and storage. The initial investment needs to be supported by the state. ¹⁶
- **3.7 Plantations and Nurseries:** With a target of achieving 33 per cent of the geographical area under forest/tree cover, there is a massive scope for undertaking plantation activities outside the forest area. Importantly, the scope exists in the areas that have faced severe degradation and also high incidence of poverty in dry land and forest based regions in the country. The earlier initiative on Social Forestry by the Forest Department had yielded limited results. Nevertheless, the activity opens up substantial scope as part of wasteland development-both on public as well as private land. A number of initiatives, especially by organizations like Society of Promotion of Wasteland Development and Tree Growers Cooperative Society as well as Foundation for Ecological Sustainability have demonstrated the potential and the ways to achieve that by involving local communities. To encourage agro forestry and backyard cultivation of trees, tree pattas may be given to women. They can own the plants, nurture them and finally sell them. This will improve their income, besides improving the environment.

3.8 Recommendations for Increasing Agricultural Growth and Productivity

Agriculture is not only about crops and non food crops but the entire interlinked agrarian system. Productivity is not just about increase in the quantity of output but also about how this is achieved – through increased acreage or increased yield. Increased yield can be very short term and destructive of land and water in the long run. It is imperative

therefore that we focus attention not just on 'productivity' (as productivity may increase and then decline or plateau as has happened in HYV regions) but on **sustainable** increase in productivity. We need clear measures of sustainability – i.e., though growth may not be spectacular it should be maintained over a period of time without leading to depletion of basic resources. The kind of crops grown matter, the kind of practices matter. Sugarcane is water intensive and hence unsuitable for regions with scarce water resources. In addition to research and extension, efforts must be made to gather information regarding farmers' traditional practices. The big question is how do we make food production attractive relative to commercial crops. This has to do with public policy in the context of imports and exports of food grains. If by development we mean the well being of people, then policies have to give priority to well-being ahead of commercial returns. Malaysia adopted a policy of 100% domestic food security – no exports unless local needs are fully met. This has pricing policy and incentives for farmers related effects. ¹⁹

Policies and development programmes must promote integrated agriculture-livestock production systems, which are ecologically sustainable and just. An NGO called ANTHRA have recommended the need to:

- a. Promote indigenous low-maintenance, multipurpose bovine breeds, goats etc as per agro-ecological conditions rather than cross-bred cows that are owned by a few rich farmers who then capture limited resources to maintain these high-producers;
- b. Provide access to grazing grounds for livestock;
- c. Provide access to fodder throughout the year. This requires minimum support price policies and PDS that encourages farmers to grow natural millets, pulses, oilseeds and legumes;
- d. Strengthen local markets;
- e. Assured access to quality water, housing, hygiene and sanitation;
- f. Robust and effective public veterinary health care system where the onus of health care is not placed on the capacity of the individual to pay but is the responsibility of the state;
- g. All extension programmes should be designed while keeping women's needs in mind. For example there is no plan for preventing diseases amongst village poultry, despite 75% of the poultry population being in small rural households, reared and managed entirely by women;
- h. Recognise that women and men may have different priorities, problems and needs. Women prioritise food crops as they provide food and fodder security, prefer local animals and breeds, backyard poultry and goat rearing and draw attention to the acute shortage of green fodder and water during summer months, lack of grazing space, lack of local veterinary health care facilities;
- i. In credit programmes and poverty allevation programmes, do not force women to purchase and rear animals that are unsuited to their area and resource base;
- j. Provide training to women on use of local herbal remedies that are easy to prepare, effective, readily available and inexpensive. Also train them to vaccinate their birds and animals;

k. Establish Livestock Feed and Fodder Corporations at the State Level for ensuring availability of quality fodder and feed, and a Livestock Development Council at the Centre.

Revive and **strengthen capital investment in agriculture** and rural infrastructure, which will generate farm and non-farm employment. In this context, the NREGA, National Horticulture Mission, Bharat Nirman, National Rural Health Mission, Krishi Vigyan Kendras, setting up of SHG Capacity Building and Monitoring Centres, and establishing women-managed Community Food, Water, Fodder and Feed Banks provide immense scope for employment of poor rural women. It is hence recommended that there should be adequate representation of women at Gram Panchayat, Block and District levels in all bodies concerned with generating, planning, designing and implementing employment, training and capacity building.

Ground Water:

At present, nearly 60 per cent of the irrigation in the country is from ground water sources; a large part of the incremental irrigation is from the same source. There are however, serious limitations to extracting ground water especially in large tracts of the erstwhile Green Revolution areas and also dry land regions. According to the assessment by Central Ground Water Board, depletion in high growth states like Punjab and Haryana, has already reached the level beyond which further extraction will become non-sustainable. States like Rajasthan, Gujarat and Tamil Nadu are fast approaching this limit.²⁰

In the high potential rainfed regions, the potential for ground water extraction is relatively better. However, these regions in the central and eastern parts of the country, face serious difficulty with respect to power supply, required for lifting ground water. There is also an added constraint faced by the poor farmers in terms of capacity to pay for the equipment and energy for ground water development.

It is therefore argued that expansion of surface irrigation through big dams and ground water through tube wells is fast reaching a plateau. The future strategy thus, has to focus on location specific needs and limits set by the eco-system.

4 Food Security is also implicated in the agrarian crisis

4.1 Under-nutrition and malnutrition are still widespread. The second National Family Health Survey conducted in 1998-99 reported that 50% of the children in rural areas are malnourished and 49% are stunted. More than 50% of Indian women between the age group 15-50 years suffer from anaemia in addition to problems of high Maternal Mortality Rate and prevalence of TB, HIV/AIDS and other infections. India may be among the fastest growing economies in the world, but the UNDP Human Development Report, 2006 shows that growth has not translated into better public health care for the citizen. The share of government health spending to total health expenditure in India is 25% and ranks 126 of 177 UN member countries. There is an

urgent need for low cost gender friendly health insurance system to protect women who are poor from social, medical or economic emergencies.²²

- **4.2** The decline in per capita food grain availability and its unequal distribution have serious implications for food security in both rural and urban areas. Inadequate purchasing power due to lack of job/livelihood opportunities is the primary cause of endemic or chronic hunger in the country according to the First Report of the National Commission of Farmers. ²³ Other factors include low wages, lack of access to land and other productive assets, availability of stored grains from the last harvest, support from neighbours, erosion of public distribution system. Ownership of even a small piece of land seems to enhance food security. ²⁴
- 4.3 The area under cultivation of the so-called 'coarse cereals' has declined continuously. These are grown primarily in rain fed areas of the south and central parts of the country. Apart from decline in area under cultivation of these cereals which are nutritionally rich, their production and yield have not only stagnated but also declined due to lack of support. Much of food security of the small peasants' households comes from these crops. When cash crops substitute these crops, food security suffers and risks increase. When the majority of marginal and small farmers depend on these crops for their food security, it is not very prudent to treat them as peripheral. Yields of coarse cereals, pulses, oilseeds and vegetables need to be increased, since these are the backbone of rainfed agriculture. That would be truly poor friendly and woman friendly policy. Crops for exports are important, but the crop systems that allow multiple cropping that would spread the risk and ensure food security are critical for survival and must be encouraged.

A number of coarse cereals, which are highly nutritious, are grown in India but which do not find place in the public distribution system due to a number of technical reasons. To promote consumption of these nutritious cereals the Planning Commission may earmark some funds for encouraging women entrepreneurs to produce value added products for marketing.²⁷

4.4 National Commission on Farmers has calculated that the cost of reaching food to around 80 per cent of our population, which is either malnourished or at risk of malnutrition, (i.e. is food insecure) will be Rs. 35,876 crore at current prices. The total subsidy needed for the universal public distribution system is as little as 1 per cent of the GDP. It further estimates that a 1 per cent increase in the tax to GDP ratio, which has fallen since 1991, can finance this national initiative. Furthermore, the expenditure will be more than compensated by the rise in national income with the elimination of endemic hunger and malnutrition.

4.5 Recommendations to strengthen food security and reduce vulnerability:

It is strongly felt that:

a. Encouragement in the form of research, extension, seed distribution, and procurement should be given to nutritious crops.

- b. Credit support also should be provided, if needed. Women might need small amounts to grow these grains in their fields. If money was available for them especially, their cultivation may increase.
- c. Support be given to small and marginal farmers to improve the productivity and quality of farm enterprises.
- d. Production of coarse or nutritious cereals be supported as much of food security of the small peasants' households comes from these crops.
- e. Decentralized food storage or grain banks in villages should be encouraged.
- f. Promote the establishment of Community Food and Water Banks operated by Women Self-help Groups, based on the principle "Store Grain and Water Everywhere"
- g. Enable access to land
- h. Regulate wages earned for work.
- i. Adopt a universal PDS. National Commission on Farmers has calculated that the cost of reaching food to around 80 per cent of our population, which is food insecure) will be Rs. 35,876 crore at current prices. The total subsidy needed for the universal public distribution system is as little as 1 per cent of the GDP.
- j. Introduce a Food Guarantee Act.
- k. Earmark funds for encouraging women entrepreneurs to produce value added products made from coarse cereals.

5 Low and Unequal Wages

5.1 Wage employment is the most important source of income for the rural poor, especially women. Women are paid lower wages in many rural areas on the assumption that women are less productive. Mencher and Sardamoni²⁸ point out that this is not based on any fact. "No one has ever measured the amount of paddy harvested by a woman and that harvested by a man. In those parts of Kerala where harvesting is paid by a share of what is harvested, usually 1 to 6, one tends to find a larger proportion of harvesting done by female. Still, we have never heard a complaint from a landowner that women were not good at harvesting, or any claim that males could harvest more in a given period of time".

5.2 Recommendations for minimum and equal wages

Article 43 states the state shall endeavour by suitable legislation or economic organization or in any other way, to give all workers, agricultural, industrial or otherwise, a minimum wage and conditions of work ensuring a decent standard of living. Despite these regulations, wages tend to be grossly unequal and activities of women remain undervalued.²⁹ It is therefore recommended that Planning Commission should ensure the enforcement of minimum wage and equal wage legislation so that all agricultural workers get the minimum wage and conditions of work ensuring a decent standard of living.

6 For Raising Agricultural Productivity Enable Women Farmers to Access Land and other Productive Assets

- **6.1** Agricultural productivity will depend increasingly on the ability of women to function effectively as farmers. While our vision for the future should be one in which rural women can move to other productive jobs over time, since the skills of the current generation of rural women lie mainly in agriculture, we need to first enhance the viability of their livelihoods within agriculture, so that future generations can acquire education and non-farm skills. This would also make for a smoother and more gender-egalitarian agrarian transition. For this we need cross-cutting links between the schemes for agricultural development and those for poverty alleviation. A critical element of such an approach is enhancing women's access to land. Women face severe disadvantages as farmers due to lack of access to property (especially land) and title to it. Access to cropland and livestock provide ways of escaping poverty. 31
- **6.2** Because of women's multiple productive roles, it is necessary that agricultural policy and programmes adopt a farming systems approach that integrates agriculture, livestock, fish, forestry and water resources, instead of treating these as separate sectors as at present.³² For all asset distribution purposes taken up by the state, women should have rights, e.g., water rights and hence water sharing, access to tanks and hence membership in the water users association (WUA), access to other traditional caste based uses of tanks (for example fishing) and other common property resources, like the forests, grazing lands, etc. Right to water and common property resources should be individual rights and not determined by ownership of land.
- **6.3** In the villages, besides the common grazing lands, sizeable areas lie under the category of wastelands. Government is encouraging growth of biofuel producing plants³³. Laws must be simplified to allow the land to be allotted to a co-operative, on the condition that they show some beneficial use of the land in a stipulated time. The first priority can be given to women's co-operatives. Landless women can be organized together to take control over these lands and grow horticultural as well as fuel-fodder-giving vegetation on these lands.

6.4 Recommendations for enabling access to land and productive assets

Because of women's multiple productive roles, it is necessary that agricultural policy and programmes adopt a farming systems approach that integrates agriculture, livestock, fish, forestry and water resources, instead of treating these as separate sectors as at present.

- a. Improve women's ownership rights and management of productive assets including land, through the mechanism of **joint** *pattas*. This should include watersheds, check dams, wastelands, community bio-gas plants created through public funding.
- b. All new assets which have accrued to the household (before a specified cut-off date) by any means (purchase, transfer, grant etc) should be registered in the name of both husband and wife, applicable to all assets such as land, houses, trees, animals,

- equipment etc. This should also apply to membership of groups/categories which are prerequisites for access to resources, e.g. water users' associations.
- c. Kisan Credit Cards should be issued to women farmers, with joint pattas as collateral. Till these are available, indemnity bonds from husband or other male relative or guarantee from independent local persons of standing should be acceptable.
- d. Banks should be asked to accept spousal ownership/membership as collateral for loans to women.
- e. The distribution of land mandated by Government of India in the 1980s with regard to surplus land, wasteland, and ceiling surplus land should be monitored and recorded and up to date records prepared within a specified time limit. The implementation of land reforms in a gender-sensitive framework should be closely monitored and up to date records prepared, keeping in mind recent legislation (Amendment to Hindu Succession Act 1956). The issue of community-held land has to be separately addressed.
- f. Lands, particularly wastelands, vested with government, should be transferred to women's groups (including SHGs) for productive use and appropriate economic activity.
- g. Distribution of surplus land and land under all land distribution programmes land ceiling act, custodial land, *bhoodan* land exclusively to rural landless women workers.
- h. Ensuring women's control over complementary resources like irrigation, credit, water, forest, fuel, fodder, information, training
- i. Given the failure of successive attempts to ban shifting cultivation (jhum, podu), in which women are especially involved, it is necessary to develop and diversify this with multiple species and high value crops (medicinal, aromatic plants) to increase diversity, enhance food security and improve women's income.
- j. Ensure adequate marketing and forward linkages linking women to markets.
- k. Provide support for value addition and market linkages for the traditional crafts in which farming women are involved, either full time or as supplementary activities.
- 1. Provide infrastructure and access to facilities like shelter, water and toilets, garbage removal, lighting, and, especially security of women in and around their work place whether on farm, inside processing factories or in the trade and market places.
- m. Cater for post harvest services storage, preservation, grading, packaging and processing and ensure preferential employment of women in these sectors.
- n. Women especially need **women friendly implements** / **tools** which can reduce drudgery, save time and enhance output and can be handled comfortably. Specific training inputs need to be provided for women.

7 Strengthen Skills, Capacities, Access to Technology and Empower Women

7.1 Women participate in all activities related to agriculture, except ploughing. Farmwomen continue to be poorly skilled, low paid and prone to exploitation. Women are left out of many formal training programmes and excluded from coverage of extension services, thereby relegating them to secondary positions in agricultural work, in families, farms and the community. In many cases, landless women get left out of training programmes. There must be an increased focus on landless women, so as to include them in various technical and other training activities. There must be a

- reorientation of schemes targeted for the poor, towards more long term inputs and services.³⁴
- 7.2 Existing formal institutions must take the initiative to recognise women's roles and needs in various fields of agricultural activity. For this they must ensure participation of women farmers in designing programmes for training and research. The methodologies, time duration, location and other factors of programme design must be appropriate to the needs of women. One example is improved tools for transplanting that eliminates constant bending down. More drudgery-reducing technology for women must be introduced so that it may reduce women's workloads, leading at the very least to, better health. 35 A number of women graduates are coming from our agricultural universities and they should be given opportunities in employment in the villages. The women workers should also be trained in managerial and entrepreneurial capabilities to lead the village women in modern technology and agriculture. The Indian Council of Agricultural Research is operating 540 KVKs distributed all over India and the number may be go to 589 in the 11th Five Year Plan. The Planning Commission should give a directive that officials in the KVKs be gender sensitized and activities of KVKs engendered. There should be special thrust and direction for women scientists to work in the villages and also train the rural women in particular.³⁶ To encourage increased enrollment of girls in agricultural education – especially in the North Indian states – there should be special recruitment of women agricultural/ veterinaray/fishery officers to overcome the social barrier faced by male officers.³⁷
- 7.3 As drylands are more dependent on groundwater, which means heavy dependence on tube well technology, women and young girls could be given training in the use of bore wells and the repairs required. Power (free power), which is an essential input for drylands, is being supplied late in the night where women are unable to use it. Alternative experiments by some NGOs like Centre for Sustainable Agriculture (Khammam district of Telangana region) show the involvement of women in labour intensive non-pesticide management and integrated pest management techniques. Production of bio fertilizer like the vermi compost, preparation of neem powder and tobacco decoction, through small units owned by the self-help groups, can be a viable alternative. Indivisibility problem can be overcome in the usage of farm equipment by owning it collectively through the groups. Already such programmes have been in implementation within the Rythu Mitra groups. Formation of women rythu sanghas can be replicated in other parts of the country.³⁸
- **7.4** Interventions that reduce the work of women both at home and in the farm have been developed and promoted in some areas. These include paddy threshers, winnowers, sprayers, harvesting tools, parboiling units, maize shellers, dal making machines³⁹. To save time in fetching water and collecting fuel wood and fodder, dig a well in the centre of the village, improving manual transport aids (handcarts), improving cooking stoves, increasing bio-mass production to meet fuel needs, plantation of fast growing fodder (especially in common lands) and developing mechanisms for its sharing all helps in saving a lot of time or releasing a lot of time that can be devoted to other income generation activities. Measures should be taken to ensure benefits of all these

to SC/ST women. Capacity building in this area should be a priority for staff training.⁴⁰

7.5 Millions in India do not have access to even the minimum 20 litres per day per person mandated by the UN Millennium Development Goals. Spending on water supply and sanitation in India is less than 0.5% of GDP. The poor, particularly the rural women, are the hardest hit since they have the least resources to provide for the adequate supply of water. Poor rural women spend hours in collection of water. If that time is saved, that would result in their additional earnings. The entire issue of conservation and rational use of water can be addressed through an inclusive policy on water.

According to HDR 2006, access to a flush toilet reduces the risk of infant death. Extreme poverty in India has meant that 120 million homes in the country, or 700 million people, have to make do without proper toilets, leading to the death of 4,50,000 infants due to diarrhoea every year. No access to sanitation means people draw water for drinking, cooking and washing from rivers, lakes and ditches fouled with human and animal excreta leading to many infectious diseases in India and loss of crores of rupees in productivity. The 11th plan must address this.⁴¹

7.6 Availability of potable water through pipelines and availability of energy for fuel purposes through biogas technology, improved technologies for drawing water and shift from traditional chulha, access to pucca housing with drainage and sewage facilities etc could reduce drudgery in the household activities that will ultimately result in increased farm productivity of women. Hence, improved technologies in the domain of household activities should be made available through appropriate policy measures. 42

7.7 It is therefore recommended that:

Training programmes, based on needs identified by women, should be organised at the doorstep of farm women may include:

- a. Skills of surveying land and resource mapping along with men at the panchayat level.
- b. Technology transfer to women in all aspects of farming and farm management. Grassroots women farmers must be trained in various fields, including dry land farming technologies, animal husbandry, forestry, sustainable natural resource management, enterprise development, financial management, and leadership development.
- c. Training in pre and post harvest technologies; storage, preservation, packaging and processing and marketing.
- d. Skills of resource management including organic farming
- e. Training programmes organised by Agricultural Universities that provide admission regardless of age, sex and educational qualifications.
- f. Improving women's access to agricultural technology through technical training and by designing women friendly agricultural technology.

- g. Awareness generation on legal rights and land ownership titles.
- h. Strengthening backward and forward linkages of agricultural sector with non-agricultural sectors in order to provide gainful employment to women workforce. Promoting agro-based industries owned and managed by women on cooperative basis can achieve this.
- i. Training in nursery raising, horticulture crop cultivation, new techniques in coarse cereals production, seed support program, storage techniques, manure preparation, bio diversity conservation, etc.
- 8 Self-Help Groups and Micro-credit: Micro-credit through Self-Help Groups (SHGs) has proved to be a strategic tool for organizing rural women in groups and promoting savings and thrift habits to gain access to institutional credit for their socio-economic development and empowerment. The rural sector requires credit policies that lead to the creation of productive processes and assets and sustainable institutional development. SHGs continue to engage in traditional stereo-typed, low return activities and the fundamental livelihood concerns of the rural poor women remain largely un-addressed.⁴³
- **8.1** Erring MFIs were charged by the district authorities with exploiting the poor with usurious interest rates and intimidating the borrowers with forced loan recovery practices. Borrower harassment by MFIs is not uncommon. The NSSO data, 2005, reveals that rural households account for 63% of the country's overall aggregate outstanding debt of Rs. 177,000 crores. Incidence of indebtedness was reported to be about 27% among rural households, predominantly in rural areas of Andhra Pradesh, Kerala, Rajasthan and Karnataka. In some cases micro credit clients are worse off after accessing loans. Since higher interest rates on micro credit do not provide scope for savings and for investing in insurance, the dominant risk covering factors for the poor, micro credit seldom propel the poor out of poverty. The crisis in Andhra Pradesh has not only exposed unethical practices by MFIs, but has raised serious questions on regulatory measures applicable to them. The government has to apply stringent regulations on MFIs operations, besides providing a safety net for the poor and vulnerable. The only alternative to the MFIs is the bank-SHG linking programme. 44

8.2 Recommendations:

- a. An integrated approach is required for meeting over-all credit needs of a poor family in terms of backward linkages with technology and forward linkages with processing and marketing organisations.
- b. Credit needs to be provided for diversified activities including consumption loans and against sudden calamities.
- c. Credit in the right amount and at the right time to farm-women should be ensured for various purposes like income-generating livelihood activities, production, housing and other emergency needs of the family.

- d. The delivery system has to be proactive and should respond to the financial needs of the farmers. Cooperative Banks and Rural Regional Banks should be strengthened which should formulate new products for diversified & integrated farm and non-farm activities, including insurance, commensurate with the demand and to provide cheaper and timely credit.⁴⁵
- a. Provide easy access to loans to lease land through SHG's especially women's SHGs.
- b. Simplify the process of giving loans, i.e. reduce the number of questions to important, non-repetitive ones.
- c. Provide gender sensitization training to bank staff so that they are sensitized to the needs of rural clients, especially women.
- d. Give employment to at least one male and one female local rural unemployed 10-12th class pass youth in all rural institutions so they can fill applications and forms and help the community to benefit from the various Government schemes.⁴⁶
- e. The outreach of the formal credit system has to expand to reach the really poor and needy. There is an urgent need for a **paradigm shift from micro-finance to livelihood finance**, comprising a comprehensive package of support services including financial services, (including insurance for life, health, crops and livestock: infrastructure finance for roads, power, market, telecom etc and investment in human development), agriculture and business development services (including productivity enhancement, local value addition, alternate market linkages etc) and institutional development services (forming and strengthening various producers' organisations, such as SHGs, water user associations, forest protection committees, credit and commodity cooperatives, empowering Panchayats through capacity building and knowledge centres etc.).⁴⁷
- f. A network of capacity building institutions should be set up to strengthen and develop SHGs to undertake the various functions into which they are expanding, including ToT, and to nurture and mentor them during the process.
- g. a more detailed understanding of the place of SHGs in women's multiple livelihoods may be built, as well as mapping the location of women in the rural and agricultural sector. 48

9 Lack of Jobs within Agriculture

A major problem confronting the rural areas is the lack of employment opportunities. Unemployment has shown a rising trend and female unemployment has been consistently higher than male unemployment. Women seem to be more confined to agriculture compared to men. Availability of other livelihood options is limited. The growth process has not been labour absorbing in this decade, much less for women workers. To work as agricultural labour which is seasonal, fetches the least income, thus women seem to be engaged in less remunerative activities compared to men. During 1993-94 – 1999-2000, the growth of jobs in the farm sector was only 0.2%.

Rural non-farm sector has contributed substantially to the family income. In times of agricultural distress, it is these non-farm activities of women that support the family and therefore, this sector needs support. Planning Commission may encourage and earmark

some funds for establishing location specific, village industries in different parts of the country. The village industries will give economic strength, employment and avenues for better nutrition to women and through her the family members. The village industries also will reduce the post harvest losses of fruits and vegetables which is estimated to be about 30% of total produce of India. A number of value added products can be made from the raw-materials produced in the villages. The Planning Commission may earmark some funds for women entrepreneurs who will initiate village industries.⁴⁹

Recommendations for increasing jobs in the rural sector

While all efforts are needed to increase jobs in the farm sector by switching over to more labour intensive crops and practices to the extent feasible, and increased investment in irrigation, watershed development, wasteland development, land reclamation etc, greater focus has to be for accelerated development of the rural non-farm sector and development of clusters around towns/market centres. A growing farm sector, better rural infrastructure particularly rural connectivity, power, regular bus service, easy availability of credit and availability of trained manpower could help in development of rural non-farm sector and creation of more job opportunities.⁵⁰

Planning Commission may earmark funds to encourage women to take up income generating activities such as poultry, milch animals and diary, sheep and goats, fish production, seed production of crop varieties, hybrid seed production and micropropagation. Additionally, Planning Commission may also earmark money to establish small labs for developing facilities for micro-propagation/tissue culture production of bio-pesticides, production of bio-fertilizers, cultivation of medicinal and aromatic plants and production of herbal medicines, sericulture, bee keeping, mushroom cultivation, nursery management and production of gender friendly implements like miniaturized grain mills, dal mills, cleaners, graders, maize shellers, groundnut decorticators etc. These industries may be subsidized by the government.⁵¹

10 Diversion of Farm Land for Non-agricultural Purposes, Displacement and Rehabilitation Policy

10.1 Displacement, dislocation and dispossession created among peasantry and forest dwellers due to mega development and large irrigation projects, increase in transport networks such as railways and roadways and creation of Special Economic Zones have increased women's vulnerability. The 11th Plan must ensure that displacement and dispossession are minimized.⁵² Prime farmland must be conserved for agriculture and should not be diverted for non-agricultural purposes. Giving away prime land affects rural women because it often tears apart family life and destroys a home environment that has been in place for generations. This often makes women vulnerable to crimes like trafficking and bonded labour. The Central government has issued an advisory to State governments seeking to ensure that only barren or wasteland and, at best, single crop farm tracts are acquired for development.⁵³

- 10.2 The Land Acquisition Act must be reviewed to ensure that corporations cannot divert prime agricultural land. If there is contract farming, then let the farmers lease land. **The recommendation** is to strongly favour safeguarding livelihoods, well being of farmers on a long term basis not quick, short term policies. Self provisioning will ensure food security. Ensuring entitlement to farming communities to land that they have traditionally been cultivating is critical for the survival of many as well as for the sustainability of agricultural practices.
- 10.3 Whenever such displacement takes place, women farmers should have a participatory role in the negotiations. The farmers should be paid adequate compensation and guarantee of future possibilities of livelihood from the project for which land is acquired by making them stakeholders. They may be offered non-agricultural jobs and social benefits, local public goods like schools, ration at subsidized rate, medical insurance, pension, etc. along with appropriate training and skills. Adequate steps need to be taken to enable farmers to adapt to their new lives once their land is acquired. Displaced families need to be provided adequate credit for their rehabilitation and resettlement.⁵⁵ When compensation is paid it should be jointly in the name of the husband and wife.
- 10.4 Increasing illegal encroachment on Common Property Resources (village grazing lands, ponds etc) with the approval of the local authorities, PRIs and traditional community authorities, who are often governed by patriarchal values and may not be gender sensitive, has severe consequences for the poorest and most marginalized, especially women, who depend on CPRs for livelihood. So does disposal of wastelands to commercial interest.

10.5 Recommendations for enabling prioritization of livelihoods of the poor/women over commercialisation:

- a. To discourage local authorities, Gram Panchayats or equivalent body, from commercial disposal of village CPR and wastelands, they should be required to place such issues before the Gram Sabha for decision, in order to ensure that voices of marginalized sections (women, dalits and poor) are not excluded. Commercial interests/companies should be banned from acquisition of wastelands for purposes of direct cultivation unless the Gram Sabha allows this with two-thirds majority.
- b. CBOs (women's groups, Dalit groups, tribal groups, SHGs) should be given priority for acquisition, lease, or grant of wastelands for cultivation.
- c. Awareness generation should be enhanced at all levels, and especially among the bureaucracy and local level traditional and elected bodies, to support poor women/marginalized groups in their struggle to protect their existing use rights over CPR.

In case of displacement, it is recommended that rehabilitation policy should ensure:

d. Protection and safeguarding of the livelihoods and well being of farmers in all rehabilitation processes.

- e. Land for land policy. At the time of land distribution and providing compensation for displacement, care should be taken to provide joint pattas/ women pattas for female headed households, S.C. and S.T. women.
- f. In case of tenants and agricultural labour, compensation and rehabilitation package should at least restore pre-displacement status.
- g. Since submergence of ecologically important watersheds, pastures and agricultural lands through hydro-electric schemes in the hills has a far-reaching impact on women's livelihoods in both the upland and downstream areas, run-of-the-river schemes should be preferred to reduce displacement of people and erosion of agro-biodiversity.
- h. Resident community affected by displacement must be ensured a stake in the newly created assets in the region.
- 11 Price support is limited to just a few crops and even though states have the option of using Market Intervention Scheme (sponsored by the Central Government), it is not used at the required scale. The crops for which this kind of support is best suited include, onion, potato, chillies, mustard, oregano, cumin, coriander, turmeric, garlic and guar. As minimum support price is much more flexible, there is a need for effective use of this instrument. In addition, the coarse cereals need to come under some regulation of price support, which would allow their procurement for PDS ⁵⁶
- 11.1 Further, PDS has failed to deliver the required food grains to the vulnerable sections of the population on time and in the requisite quantity and quality. The institution of foodgrain banks their management by women SHGs could be considered to enable uninterrupted supply of food grains even in times of drought or other natural/man made disaster.⁵⁷

11.2 Recommendation

- a. Include coarse cereals in the PDS.
- b. MSP does not operate in all regions. For example, there is no procurement from Bihar or Orissa. They do not actually get any price support. The procurement should be done from all regions, it should become a decentralized process.
- c. Management of foodgrain banks by women SHGs to enable uninterrupted supply of food grains

12 Invisibility of Women's Work due to conceptual Biases in Measurement

- Women's participation in agriculture and animal husbandry, and their role in decision making is not fully recognised by policy makers, agricultural research and extension institutions and development agencies. The causes of these are complex, historical and are reinforced by social, cultural, political and religious practices and beliefs. Serious inaccuracies and measurement failure occur in the recording of the work that women do due to conceptual and operational (enumerators' and respondents') biases at the time of data collection. Women are known to work longer hours than men and the fact is that women participate in the work force to a far greater extent than is measured by the data. But a lot of the work they do is unrecognised, let alone equally remunerated. 58
- **12.2 Recommendation:** Correct the statistical invisibility of women's work through preparation of a satellite account that should include in detail the work that women undertake. Policies and funds allocation need to take cognizance of this, address women's needs and correct the deprivation and marginalization suffered by women and especially those living below the poverty line.⁵⁹
- 13 Engendering Agriculture must not be reduced to women's participation in training programs for technology dissemination or micro credit. While these are essential elements that will empower women to engage more actively with the development processes, the key is to ensure that opportunities for their participation are institutionalised within planning, management and assessment frameworks; and that adequate attention is given to the educational process through which women engage with the institutions in an informed and empowered way.
- **13.1 Recommendation:** It is therefore recommended that agricultural education be made gender sensitive and research, development, extension and services be engendered to give due recognition to the multiple role played by women agriculturists. Ministry of Agriculture has initiated gender sensitive training and this needs to be strengthened and mainstreamed on a massive scale.

TOR No 2: To Review the progress of schemes/measures for empowerment of women in agriculture and suggest continuance/ discontinuance/improvement in design/ convergence of the on-going programmes and effective inter-sectoral integration during the XI Five Year Plan.²

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² This section of the report was prepared by Amita Shah based on notes and papers provided by Neeraj Suneja, Head, National Gender Resource Centre, Ministry of Agriculture, Rasheed Sulaiman et al and Neera Burra, through the UN Solution Exchange.

1. Review of the Policies and Progress of Schemes/Measures

1.1 Evolution of Policy Approach:

There has been a positive though gradual shift in the perspective on gender mainstreaming and women's empowerment in the context of agriculture. The trajectory has been from viewing women as farm workers to recognizing them as producers or co-farmers. This would imply a shift in the emphasis to treating women as primary stakeholders in the processes of agricultural growth rather than merely as beneficiaries of the various schemes and programmes, implemented by the states/central Governments.

It is therefore, imperative that gender mainstreaming should aim at influencing the very strategy for agricultural growth (i.e. pace, composition, and spatial spread), along with the requisite support coming from various schemes and programmes that may specifically address the issues of women's empowerment viz; enhancing access to land and other factors of production; information dissemination; and capacity building⁶⁰.

Gender mainstreaming started from the VI Five Year Plan when 'opportunities for independent employment and income' for women was recognized as a necessary condition for raising social status of women⁶¹. Since then there has been an upward movement in the policy approach with respect to gender issues in agriculture as outlined in Box 2.1:

Box 2.1: Evolution of Policy Approach for Gender in Agriculture

	ripprouch for Gender in rigi	
Five Year Plan	Main Emphasis	Policy Initiatives
VI Plan: Shift from Welfare	*Direct Intervention for	Women Youth Training and
to Developmental Issues	Women farmers	Extension Project
	*Emphasis on Health,	(WYTEP) in Karnataka
	Education and Employment	(with Danish Funding)
	*Women in Agriculture	
	(and allied activities) were	
	given priority along with	
	promotion of non-farm	
	activities.	
VII Plan: Raising Economic	Beneficiary oriented	Two more projects for
and Social Status of Women	programmes for women in	Training under the Danish
	different developmental	funding in Tamil Nadu and
	sectors.	Orissa; and one project with
	* Focus on promoting	Dutch support in Gujarat.
	employment by providing	
	training to skilled and	
	unskilled women.	
VIII Plan: Increased	* Enhancement of	CSS-covered 7 states and
Emphasis on Economic	employment through	15 districts; Danish support

	<u> </u>	T
Activity	_	for M.P. in 13 districts;
	SHGs.	Dutch Support for A.P. In
	*Beginning of the Central	12 Districts
	Sector Scheme (CSS) of	
	Women in Agriculture and	
	Expansion of Donor	
	Agency supported Projects	
IX Plan: From	Component Plan for	*Continuation of the above
Development to	Women in all	schemes
Empowerment	Development Schemes	*Launching of the UNDP
		project in 3 states
X Plan: From Women	*Reforms in Agricultural	*Setting up of NGRCA
Alone to Gender	Extension	*Setting up of ATMA in
Mainstreaming	* Subsuming CSS under	252 districts in major states.
	`Support to State Extension	* World Bank Supported
	Programmes fro Extension	NATP extension project in
	Reforms'	7 states
	*30 % allocation for women	
	in each of the beneficiary	
	oriented projects	
XI Plan: Propose to Move	Consolidation of Extension	Caféteria Approach for the
Towards a Holistic	Reforms	states to chose from a large
Approach (as per the		menu of projects under CSS
submission of the sub-group		
on Agricultural Extension)		

As per the present approach, gender mainstreaming means that women have to be part of all the schemes/programmes of the agriculture sector and the strategy of agenda setting aims to provide structural, legislative, and material resources so that women can participate and benefit on par with male farmers by setting their own agenda⁶². In this context, it may be re-iterated that Gender Mainstreaming should essentially mean engendering the growth strategy itself rather than incorporating gender (rather women's) components once the strategy is already identified.

1.2 Persistence of Partial/ Compartmental Approach:

Prima facie, there are three components of Gender Mainstreaming Approach. These are: Women's Empowerment, Capacity Building, and Access to Inputs as well as technology and resources⁶³. These are of course, inter related. It may however, be noted that the first i.e. women's empowerment is an overarching goal, for which the next two are important policy instruments. This suggests some conceptual gaps in the official discourse on gender mainstreaming. As a result, the policies for gender mainstreaming (which cuts across different Ministries such as Agriculture, Social Welfare, Health and Education) tend to adopt partial or compartmental approach.

This issue has been raised several times though, with only limited success. The following observation succinctly captures the reality.

The compartmentalization of schemes and activities to be implemented by different departments and ministries has led to a situation where typically for example, a Department for Women and Children would not address the problems of women in agriculture, while the Department of Agriculture itself would not necessarily recognize women as farmers. Again Departments of Forestry would not deal with agro-forestry. Departments of Rural Development tend to concentrate upon women's self-help groups that come together around thrift and credit, processing and marketing, but do not address the concerns of women farmers or cultivators. The sectoral division of work according to departmental responsibility has meant that the situation of the potential beneficiary of the developmental intervention has not been addressed holistically. At the grassroots or the village-level, women are either not recognized as active agents in agriculture or they are approached schematically and programmatically by different departments' [Burra, 2004; p.23].

Of the three main aspects of gender mainstreaming noted above, the MoA could contribute a part of the entire task described as follows:

Tasks for Gender	14 Main Ministries	15 Role of MoA
Mainstreaming in		
Agriculture		
Women's Empowerment (human capital formation, exposure, leadership, autonomy, self esteem, and food security)		Gender Focused Strategy for Agri. Growth (main contributor along with other Ministries)
Capacity Building in Agriculture (dissemination of information and technology)	MoA	Various Extension and Training Programmes (Almost the sole contributor)
Access to Agricultural Inputs (including land, water and credit besides agri-inputs).	MoRD; MoA; MoEF	Access to Agricultural Inputs; Formation of SHGs; Marketing Facilities (partial contributor with MoRD and MoEF having a major control over property rights regimes).

While the need for a coordinated approach across Ministries is well recognized, it is assumed that the impact of the schemes undertaken by the various Ministries will ultimately converge towards the goal of women's empowerment. Introduction of **Component Plan for Women** in all development plans during the Ninth Five Year Plan was a step in this direction.

The above approach though useful, has limitations in so far as it continues to address various facets of women's empowerment in a fragmented manner. Even while recognizing the need for degree of centralized policy making as well as coordination, it has been noted that `a holistic and integrated view of women is a *sine qua non* of each and every part of Government functioning in a democratic set up. This is essential to avoid fragmentation of perspectives.'64

It may be noted that the caféteria approach, being promoted under the reformulated Centrally Sponsored Schemes (CSS) also reinforces the fragmented approach noted above. It is likely that a fragmented approach may overlook other important aspects like education, nutrition security, and social space. Ideally, mainstreaming of gender concerns in agriculture should form a part of the synergy between all these aspects.

1.3 Going Beyond Centrality of Training and Formation of SHGs:

The wide spectrum of schemes suggests that the two major planks of the present approach for gender mainstreaming are: (a) information dissemination and training; and (b) access to credit. This in turn, implies that capacity and skills enhancement are the two major gaps, bridging which would lead to women's empowerment.

This proposition is found to be problematic. It has been noted that the relationship between technology and women's work status is mediated by a number of socio-economic constraints faced by women especially, poor women in agriculture. Hence it is imperative that increased access to information and skill development needs to be backed up with a better understanding on how these constraining factors impinge on women's empowerment. Enhancement of skills and the knowledge base among women therefore, is a necessary but not sufficient condition for attainment of empowerment⁶⁵.

A comprehensive approach should therefore **focus on livelihood security** where multiple activities undertaken by women - both farm and off-farm - are being promoted in an integrated manner⁶⁶. Such approach is a critical pre-condition for ensuring that individual women (and their households) get multiple supports from various schemes/programmes in an integrated manner so as to consolidate the impact. In the absence of convergence among various schemes (even within the Ministry of Agriculture), the impact on women's economic empowerment in agriculture, at best, may remain scattered and isolated, hence, not very substantial.

Three aspects deserve special attention in this context: addressing the need for land of poor households; provision of support services like child care and work condition (reduced work load and drudgery); and women's land rights.

1.4 Major Initiatives: Coverage and Achievements

As noted earlier, it may be useful to treat capacity building and access to inputs/resources as the two main instruments for attaining women's empowerment in the context of

Agriculture. In this context, NGRCA lays special emphasis on **structural**, **functional**, **and institutional** measures, while serving as a **focal point for convergence**.

Besides the coordinating role to be played by the NGRCA, the main focus of the various schemes/programmes undertaken by the MoA under the two components viz; Capacity Building and Access to Inputs/ Resources have been as follows.

Main Instruments for Women's	16 Specific Schemes/ Activities
Empowerment in Agriculture	
1. Capacity Building	Dissemination of package of practices;
	Skill Development; Training for
	Livelihood Options; Exposure Tours and
	Mahila Goshties; Gender Sensitisation
	Training (for extension staff); Awareness
	Generation through Mass media
2. Access to Inputs/ Resources/Markets	Thrift Fund; Micro Capital assistance;
	Revolving Fund; Multipurpose Centre;
	Working Sheds; Grain/seed Storage; Land
	development and water harvesting; Support
	for Agricultural Implements; Networking
	Support

1.4.1 Coverage and Achievements

A plethora of schemes are already in place in order to attain capacity building and increased access to inputs as well as resources among women. These schemes, primarily, are being supported under the Extension division of the MoA. Apart from this, other divisions also make provision for women's involvement in various schemes/activities.

The spectrum of women focused schemes thus covers a wide range of activities as listed below.

Supporting Division of Mo	Main F	ocus					
1. National Resource	e Centre	in	Focal	point	for	coordination	and
Agriculture	converg	gence					
(facilitating role)							
2. Extension			Central	ly spons	sored a	as well as supp	orted
(minimum 30% o	f resources	on	scheme	s for w	omen	in agriculture;	Mass
beneficiary orient	ed program	mes	media	support	for ag	gricultural exte	nsion;
and activities are t	be utilised	l for	Establis	shment	of Ag	gri-clinic and	Agri-
women farmers	and wo	men	busines	s centr	e; Ex	tension suppo	rt to
functionaries und	er the cei	ntral	central	institutes	s/DOE		
support to the s	ates under	the					
Policy Framework	for Agricult	tural					
Extension (PFAE).							

3. Other Divisions
(it is desired that a specific proportion (ranging from 10-30%) of resources should reach women farmers; women applicants get preference; reservation in local institutions like watershed development committee.)

Seeds; Horticulture; International Cooperation; Integrated nutrient management; machinery and technology; Technology mission on oil seeds; Plant protection; Natural resource management; Rainfed Farming; Agricultural Marketing; Agricultural census; Macro Management.

While information about cumulative achievement from various centrally sponsored/donor agency supported schemes implemented since the 8th five year plan is difficult to obtain, a brief overview of the progress is presented as follows⁶⁷:

Box 2.2: Special Programmes for Women in Agriculture-A Profile

S.	Name of	Donor	State	Duration	Cost	Coverage	No. of	Farm
No	the Project	Agency			(in		FWG	Wome
					Crores)		constit	n
							uted	trained
1.	Central	MOA,	(7 States)	Phase-I	1.642	One district each in	210	4,200
	Sector	GOI				7 States		
	Scheme of		Haryana,	1993- 1997				
	Women in	100%	H.P.			Hissar(Haryana)		
	Agriculture	grant-in-	Punjab			Shimla((H.P)		
		aid	Maharastra			Jalandhar(Punjab)		
			Kerala			Thane(Mah.)		
			Rajasthan			Palakkad(Kerala)		
			U.P			Udaipur(Rajasthan)		
						Bulandhshahar(U.P)		
			(15 States	Phase-II				
			including 7		4.96	Upper Subansiri	240 in	9,00
			Phase-I	1997-2006		Kamrup	additio	0
			States)			Tamenglong	n to	
						Jaintia Hills	210	
			Arunachal			Lunglei		
			Pradesh,			Kohima		
			Assam,			East Sikkim		
			Manipur,			West Tripura		
			Meghalaya,					
			Mizoram,					
			Nagaland,					
			Sikkim &					
			Tripura					
	Women &	DANIDA	Karnataka	Phase-I	4.90	11 districts		29,102
	Youth			(24.9.82 to				FW +
	Training			30.6.89)				25,300
	Extn.							FY
	Project			Phase-II	28.40	26 districts		=
	(WYTEP)			(1.7.89 to				54,402
				31.5.2000)				

								87,006
				Phase-III (1.6.2000 to	45.93	27 districts	7000	
				31.5.2005)				60.240
				App. 23 years	79.23			69,249 2,10,65 7
3	Tamil Nadu Women in Agriculture	DANIDA	Tamil Nadu	Phase-I (1.7.86 to 30.9.93)	4.13	27 districts (except Chennai)		15,862
	(TANWA)			Phase-II (1.10.93 to 31.3.2002) extended to	33.92			87,700 direct trained
				31.3.2003			2000	(5,51,0 00 indirect trained)
				App. 17 years	38.12			1,03,56
4.	Training and Extension for Women	DANIDA	Orissa	Phase-I (2.12.87 to 30.6.95)	3.36	4 districts		1,06,22
	in Agriculture (TEWA)			Phase-II (1.7.95 to 31.3.03)	11.85	19 districts	10143	5,64,82 4
				App. 15 years	15.21			6,71,04 8
5.	Madhya Pradesh Women in Agriculture (MAPWA)	DANIDA	M.P.	Phase-I (11.11.93 to 31.1.2002)	6.24	8 districts		14,225
	(MAF WA)			Phase-II (1.2.2002 to 31.12.2005	6.98	12 districts	4043	45,050
				App. 12 years	13.22			59,275
6.	Training of Women in Agriculture (TWA)	DUTCH	Gujarat	Phase-I (1.6.89 to 30.6.97)	4.97	6 districts		18,536 FW and 1348 Young
				Phase-II (1.7.97 to 30.9.2003)	12.13	12 districts	596	Girls
				30.7.2003)				1,47,55 6
				App. 14 years	17.10			1,67,44 0

				1		I		
7.	Andhra Pradesh Training of Women in	DUTCH	Andhra Pradesh	Phase-I (24.8.93 to 31.3.2000)	5.87	6 districts		51,963
	Agriculture (ANTWA)			Phase-II (1.4.2000 to 31.3.04	44.03 (revised to 17.52)	12 districts		58,279
				Current Phase (Dec. 05 to March 07)	8.80		1777	
				App.12 years	32.19			1,10,24 2 (so far)
8.	UNDP- GOI Food Security Programme	UNDP						
	(i) Empowerment of Women Farmers for Food Security: U.P.		Uttar Pradesh	1.11.99 to 31.12.05	10.04	11 districts	582	13,968
	(ii)(a) Strenghening Natural Resource Mgt. on Sustainable Livelihoods for Women in Tribal Orissa		Orissa	1.11.9 9 to 31.12. 05	11.01	7 districts	700	16,800
	(b) Additional Support to Cyclone affected distts.		Orissa	1.11.99 to 31.12.05	1.495	4 districts	224	5,476
	(iii) Sustainable Dryland Agri. by Mahila		Andhra Pradesh		10.42	5 districts	700	16,800

Sanghams:	1.11.99 to			
A.P.	31.12.04			
	App. 6	32.965		53,044
	years			
Total:		6.602	450	12 200
Total:		0.002	450	13,200
Grand		0.002	450	13,200
 		234.637	28,215	13,88,4

It may be noted that approximately 13.88 lakh women farmers have been benefited through Women Specific Programmes in over 23 years at a cost of Rs. 234.64 crores. This works out be approximately Rs. 1700 per woman farmer. The schemes have covered about 143 districts in covering most of the states, and have promoted 28,000 SHGs.

1.4.2 Review of Experiences

(a) Positive features

According to the official assessment, the overall experiences from implementation of various schemes/programmes (listed in Box 2.2) have brought out certain positive features.⁶⁸ These are:

- Increase in `general awareness' among women farmers
- Substantial increase in income, and visible impact on women's socio-economic status and food security
- Increase in access to information
- Success of some innovative approaches
- Registration of land under `joint patta'
- Increased barraging power due to infrastructural support
- Diffusion of gender friendly tools

(b) Limitations

While these are encouraging results, the depiction of the achievements of the major schemes brings to the fore three major concerns:

- (a) Lower than the stipulated allocation and gap between targets and achievements.
- (b) Limited coverage especially, in terms of direct beneficiaries, despite large coverage of states and districts.
- (c) Seemingly low impact in terms of economic and overall empowerment.

There are not many independent assessments of these schemes in the public domain.

An overview based on select studies brings out following important aspects⁶⁹:

Substantial gaps exist in terms of most of the aspects like access to technology, markets, credit etc. And that the gap persists despite the policy support by the state and involvement of NGOs in implementation.

Another important feature pertains to low level of budgetary support for women specific schemes. The actual spending is way below 30 per cent of the allocation for various activities under the Women's Component Plans.

The present administrative arrangement for Agricultural Technology Management Agency (ATMA) does not make any special provision for having women representatives.

Notwithstanding the favourable outcomes of some of the programmes like Training Women in Agriculture, **scaling up** such schemes, covering a large proportion of women farmers on a continuous basis, is a serious issue.

Besides mobilisation of financial support and appropriate staffing pattern, up-scaling of these schemes also raises the issue of involvement of **appropriate implementing agencies**. In this context, involvement of voluntary organisations in agricultural extension, introduced during 1994-95 may deserve special attention.

The issue of agency is particularly important in the light of the fact that the extension services had virtually collapsed by the end of the Tenth Five year Plan. The next phase of programmes should therefore be seen in the light of the overall reforms being proposed in the extension services.

Involvement of women under the various schemes of the other divisions is generally obtained in a ritualistic manner. Thus the efforts are not only thinly spread, but they often lack focus.

1.5 Towards Reforms in Agricultural Extension

The recommendations of the sub-group on Agricultural extension have incorporated a number of aspects pertaining to mainstreaming gender concerns in agriculture. These have been presented in Appendix 2.2. One of the important features of the recommendations is adoption of a holistic approach, which had been missing till now.

The recent initiative on Cafeteria approach provides scope for undertaking location specific activities from a large menu of schemes.⁷¹ The main objective of the cafeteria approach is to facilitate formulation of state level action plans by providing guiding principles and approach for developing proposals for specific interventions. As per the paper prepared by Sulaiman et.al. (2003) the guidance provided is based on issues that were considered important by key persons in the Ministry of Agriculture as well as project managers and implementers of leading donor assisted projects, such as, the

NATP, TWA and the EIRFP as well as a synthesis of the lessons learnt from documented information. Since the cafeteria is essentially guidelines, it allows the implementing agency (who will be developing the programme or project), at the district/block level, to choose an approach that fits into their specific situation (based on local problems, socioeconomic conditions of women, nature of primary occupations, availability of suitable organizations to partner with etc). The cafeteria is based on a number of assumptions. These are:

- The cafeteria is not seen as a uniform approach to dealing with the needs of women farmers across India.
- Programmes and projects are developed from a grass roots level and are based on a thorough needs assessment of the local situation.
- Each district has the flexibility to develop a programme or project that is relevant to their local situation.
- The district/block level authorities have sufficient operational flexibility in implementing the programme or project.
- There is sufficient flexibility in the design of the programme or project that allows opportunity to learn from progress and to make mid-course corrections as required.
- Programmes are developed in partnership with different agencies and organizations.
- Mobilization of groups community resources persons.
- Groups formation, capacity building including training and skill development.
- Linkages and support resource/information centers, hire schemes, convergence with other projects, co-ordination of inputs, marketing, credit, diversification, private sector, commercial development.
- Communication and media support to extension pictorial material, T.V.
- Technology development, identification, evaluation, refinement for women to reduce women's workload (production and post harvest technology), adoption
- Staffing increase number of women extension workers
- Gender training and sensitization for policy makers, implementing agencies, extension workers
- Sustainability

2. Towards Broadening the Coverage/Activities and Convergence

The foregoing discussion indicates that the present approach for gender mainstreaming needs strengthening in terms of: (a) adoption of a more holistic and comprehensive approach to impact multiple activities and requirements of individual farming women; (b) up-scaling; and (c) effective implementation perhaps, in partnership with NGOs. All these would involve fresh thinking and an overhauling of the design, resource mobilization, and implementation machinery.

The reforms in agricultural extension undertaken during the 10th plan and the recommendations that have been submitted for formulation of the 11th plan (Appendix 2.2) are steps in the right direction. However, they may not adequately address the issues raised above.

Reiterating the relevance of livelihood-security, as a central focus of gender mainstreaming, thus becomes important. It is in this context, the UNDP supported project on `Empowering Women through Food Security' may provide useful insights.

Recognising the increasing feminisation of agriculture and the key role that women play in ensuring food and livelihood security at the household and community levels, the Government of India and UNDP initiated three projects for women in agriculture in the states of Andhra Pradesh, Uttar Pradesh and Orissa in 1999, with an outlay of US \$ 7.5 million to cover 42,000 women living in over 1000 villages in these three states under the Food Security Programme. This works out to be approximately Rs. 9,000/ per farming woman covered by the project.

These projects provide resources and opportunities to women's groups to purchase or lease lands, increase and improve their private agricultural land, experiment with a range of farm and off-farm based economic activities, and improve their access to sustainable farm practices, quality seed and inputs. Support is also provided for building rain water-harvesting structures, de-silting tanks and ponds and reviving irrigation systems to improve the productivity of the land. Access to productive assets including land, credit, technologies, and subsidies was also made available. The projects have a major focus on gender issues in agriculture.

Located within the empowerment⁷⁴ approach, the projects are however attempting to go beyond improving access to food security alone. They are contributing to improving women's access to agricultural land, markets, banks, district administration and *Panchayati Raj* Institutions.

The project has been found fairly successful in terms of meeting its multiple objectives of promoting group farming; availability of micro capital; regeneration of waste land, reduced migration, adoption of sustainable farming practices; setting up grain banks and improving food security. It may however, be noted that the project cost (i.e. Rs. 9000/per farming woman) is likely to be on a higher side as compared to the other schemes supported by the central/state's budget. The critical point is that the cost, given the holistic approach and comprehensive impact, may not be so high. In fact the real issue is that of pooling of resources from various Ministries (especially, MoA; MoRD; WCD etc.) with a view to effective use, as against spreading them thinly with limited coverage and/or negligible impact on each individual beneficiary (and the household thereof).

It is imperative that the next phase of policies may tend to move in this direction, notwithstanding the problems of breaking the departmental structures and the mind-set governing that.

The following lessons from the UNDP-MoA project may be useful in this context:

Recommendations:

- Law, policy and programme should recognize women as owners/joint owners/farmers/cultivators/tenants.
- Governmental schemes need to be devised in ways that overcome narrowly defined departmental mandates.
- Officials of governments, NGOs and other agencies connected with agricultural developmental need to be sensitized and trained on the role and place of women in agricultural development. Government programmes should create institutional frameworks for interaction with CSOs.
- Governmental programmes should be so designed so that local women's groups, NGOs have maximum autonomy of decision-making in general and over the use of resources in particular within a broad framework for women farmers. This flexibility is crucial.
- Funds need to be earmarked for capacity building of women's groups in order to ensure sustainability of interventions.
- In order to promote food security and reduce the vulnerability of local communities during periods of food scarcity, decentralized food storage and distribution needs to be encouraged.

3. Specific Recommendations

In light of the foregoing discussion, we have tried to highlight some of the important aspects that need to be given special emphasis, **besides the ongoing schemes on capacity building and skill formation**. These are:

- 1. Needs assessment for training among different category of women farmers engaged in diversified farming systems-livestock, horticulture, collection and processing of NTFP (especially medicinal plants), fisheries, organic/sustainable farming practices across agro-ecological conditions.
- 2. Special component plan should be strengthened, by adapting the holistic approach of the UNDP-project. The relatively higher cost in the UNDP-project could be met by pooling resources from the ongoing schemes of other departments or, adopting a commonly shared approach with coordinated strategy for project implementation so as to cover a large number of beneficiaries with substantial impact on each of them.
- 3. Exposure visits and gender sensitization should continue to receive special emphasis.
- 4. Involvement of NGOs in project design, setting up of priorities with respect to areas and group of beneficiaries, and project execution.
- 5. Setting up priorities in terms of marginal areas (such as arid-semiarid; forest based; hilly; coastal; and flood prone) and segments of women (widows and women headed; Scheduled castes and tribes; and landless/land poor).
- 6. Address the special needs of women headed households from hiring male labour to interface in input-output markets.
- 7. Promotion of group cultivation (consisting of women's groups) by providing special subsidies in order to overcome investment constraints. Providing CPLRs to women's groups on lease for 20-30 years.

- 8. Promotion of grain and seed banks, especially in highly poverty stricken and remote areas.
- 9. Identify the processes/technology for reducing drudgery.
- 10. Support women's movement for land rights and implementation of minimum and equal wage rates.
- 11. Enhance special subsidy for promoting sustainable farming practices involving low external inputs, especially in areas where poor households are already abstaining from using chemical inputs due to higher cost (organic by default). The need is to provide these poor households special support for increasing the productivity without increasing the use of chemical inputs.
- 12. Undertake extensive assessment of the ongoing schemes with a special emphasis on their impact on 'empowerment' rather than information dissemination and skill formation *per se*.

At this stage it is not possible to give recommendations on a scheme by scheme basis, in absence of adequate information and impact assessment studies. Pending this, two aspects are important: (a) give special emphasis on the above aspects; and (b) strengthen the overall reach of the state supported extension network with increased coverage of women specific schemes at least up to 30 %.

TOR 3: To review the recent initiative of gender budgeting and outcome budget for empowerment of women in agriculture and suggest measures, if any, for their future improvement³.

- 1. Gender Budgets are only a tool to track allocations of resources to men and women. The purpose is to attain outcomes needed so that we can address issues such as increased feminisation of agriculture and poverty, exploitation of women in low paid, arduous, insecure jobs, wage differentials between men and women wages, persistently high IMR, MMR, morbidity, anaemia and malnutrition due to lack of access to nutrition and quality health care, gender gaps in literacy and education, lack of access to water and drinking water and statistical invisibility of women's work.
- 2. Gender Budget means budgeting in ways that not only take note of where women are, their disadvantages and seek allocations for measures that will redress those disadvantages; but also to bail them out of old stagnant enterprises or declining ones by creating opportunities for entry into better alternatives.

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³ This section of the report was prepared by Aasha Kapur Mehta based on a Background paper on Gender Budgets for National Commission for Women (2004), presentations made at MWCD-IIPA Gender Budget workshops and an ISST-IHC workshop on NREGA, notes sent by Neeraj, Vibhuti, Alka and Yamini (CBGA) and suggestions by Maithreyi Krishnaraj on the concept of gender budgeting. It builds on the points made in item 1 of the TOR.

3. For the Plan to be Gender and Poverty Sensitive it must allocate funds so that first priority is given to ensuring food security and access to food for all, especially those in severe poverty – based on work on demand for the able bodied and provisions by the state for the old, disabled and chronically ill. This must have first charge on plan and budgetary resources. Availability of water must be given high priority to reduce drudgery suffered by women and opportunity cost of their time in fetching water.

4. To strengthen food security, provide allocations in the 11th Plan to:

- a. Enable ownership of land by women as this reduces vulnerability to poverty.
- b. Provide for decentralized food storage through village level grain banks
- c. Encourage research, extension, seed distribution, and procurement of coarse cereal crops or nutritious crops as much of food security of the small peasants' households comes from these crops.
- d. Access to credit to enable production of these grains.
- e. Enable increase in yields of coarse cereals, pulses, oilseeds and vegetables, since these are the backbone of rainfed agriculture. That would be truly poor friendly and woman friendly policy.
- f. Extend price support and procurement to other states and to rain fed crops like millets and pulses and distribute them through PDS.
- 5. Wage employment is the most important source of income for the rural poor, especially women. Allocate funds to enable extension of the NREGA such that women in each household gets access to at least 100 days work in each year and their right to get work does not get subsumed within the household. Work must be available throughout the year and payments made directly to the person who does the work. Women must have job cards in their name. Women are paid lower wages in many rural areas. Allocations are needed for monitoring systems to ensure equal wages for equal work and timely dispersal of wages. Empower women's organizations and citizens groups to monitor the enforcement of equal and minimum wage legislation by state government and the adherence to norms in poverty alleviation programmes.
- 6. To Reverse the Deceleration of Agricultural Growth and to Raise Agricultural Productivity scientific agronomic practices must be adopted based on bridging the gap between knowledge of farmers and scientists. Therefore the plan must budget adequately for:
 - a. strong extension and technical support. The training and extension agenda must be determined in consultation with women and they must have access to it
 - b. adequate trained staff.
 - c. agricultural research that provides solutions to farmers location-specific problems based on soil and moisture conditions, methods of sowing, application of inputs, types and dosage of nutrients, pesticides, crop mix etc. Undertake technology transfer to women in all aspects of farming.

- d. Provide capacity building to ensure forward linkages for use of the raw produce; pre and post harvest technologies; storage, preservation, packaging and processing and marketing.
- e. village level demonstrations at the doorstep of women at timings that are convenient for them, ongoing interactions with village level workers and strong links between laboratories, scientists and extension workers.
- f. special training programmes and job opportunities for wives, mothers, daughters of farmers who have committed suicide.
- g. special needs of women cultivating waste land and women in dry land farming.
- h. significant increases in public investment in agricultural infrastructure especially access to water for agriculture, roads, electricity and communication.
- promotion of water conservation, rainwater harvesting, sprinkler and drip irrigation and watershed management. Watersheds not only increase water levels - thus giving boost to agriculture and increasing both the production and employment - but also provide more drinking water in the village. In watershed development projects, women must be treated as stake-holders not as 'beneficiaries' or 'wage-earners'.
- 7. Significantly enhance financial allocations for programmes for development of rain fed agriculture, alkaline land reclamation and development programme, integrated rural energy programme, biogas programme, improved chullas, Accelerated Rural Water Supply, Fodder Scheme, Rural sanitation etc.
- **8.** Establish an independent regulatory authority which should be required to regulate, test and certify quality of inputs e.g. seeds, pesticides.
- 9. Plan for Crop insurance and risk mitigation for small and marginal farmers.
- 10. Evolve a social safety network for farm women and men to offset the adverse impact of globalisation of agriculture on women.
- 11. Provide funds to enable transfer of lands vested with government to women's groups (including SHGs) for productive use and appropriate economic activity. Ensure women's control over complementary resources like irrigation, credit, water, forest, fuel, fodder, information and training.
- 12. Allocate funds to enable micro-financial services to support the multiple livelihoods of women in agriculture. Simplify the process of giving loans, i.e. reduce the number of questions to important, non-repetitive ones.
- 13. **Displacement, dislocation and dispossession** created among peasantry and forest dwellers due to mega development and large irrigation projects, creation of Special Economic Zones etc have increased vulnerability of the poor especially women. Whenever such displacement takes place, women farmers should have a participatory

role in the negotiations and should be paid adequate compensation and guarantee of future possibilities of livelihood from the project for which land is acquired by making them stakeholders. At the time of land distribution and providing compensation for displacement, joint pattas must be provided and women pattas must be distributed specifically to female headed households, S.C. and S.T. women. Ensure women's livelihoods in all rehabilitation processes.

- 14. **Strengthen capital investment in agriculture** and rural infrastructure, which will generate farm and non-farm employment. Provide adequate funds for NREGA, National Horticulture Mission, Bharat Nirman, National Rural Health Mission, Krishi Vigyan Kendras, setting up of SHG Capacity Building and Mentoring Centres, and establishing women-managed Community Food, Water, Fodder and Feed Banks provide immense scope for employment of poor rural women.
- 15. Encourage horticultural activities, nursery raising, nursery maintenance, hybrid seed production, and tissue culture propagation of fruits and flowers as these are remunerative employment options for women. The fruit and vegetable processing industry also has high employment potential.
- 17. Allocate funds for development of drudgery-reducing technology for women and awareness about and access to it. This will reduce drudgery, save time and energy and enhance output.
- 18. Provide funds for inclusion of courses on Gender and Agriculture in the Curricula of Agricultural Universities.
- 19. Provide for development of a Satellite Account to include the invisible work women undertake.
- 20. Give employment to at least one male and one female local rural unemployed 10-12th class pass youth in all rural institutions so they can fill applications and forms and help the community to benefit from the various Government schemes.
- 21. Provide a special fund for women in distress in agriculture.
- 22. There are several Departments in the Ministry of Agriculture, but only the Dept of Agriculture and Cooperation (DAC) has initiated a gender budgeting exercise, presented in Performance Budget 2006-07. Under most of the schemes no specific allocations have been earmarked for women farmers. Policy guidelines for the programmes/schemes must earmark funds for women as has been done for the "Support to States for Extension Reforms" based on Agricultural Technology Management Agency (ATMA) Model launched in 2006-07. The guideline mandates that 30% of resources on programmes and activities must be allocated for Women Farmers and Women Extension Functionaries. Gender Budgeting should be extended to other departments within the Ministry of Agriculture. Budgetary allocation in the Ministry of Agriculture must earmark 30% of all development oriented funds for

women and no diversion of finances for any other purpose should be allowed. For efficient utilisation of the Women's Component Plan, the Ministry of Agriculture must coordinate its efforts with Ministry of Women and Child development.

Therefore, reprioritise allocations in the 11th Plan so as to give priority to eradicating hunger, ensuring food security, access to work and fair wages, development of gender sensitive technical and extension support, access to land and other productive resources and development of infrastructure in rural areas to eradicate poverty and hunger and enable growth in the agricultural sector.

TOR 4: To review and learn from the Non-Governmental Sector about their successful gender friendly innovations, approaches and strategies and to suggest ways and means to promote adoption of the same in Government sector.⁴

Many NGOs in India have successfully used innovative agricultural techniques and with the participation of women. All these, while inspiring, are stray stories without any clear link to concerted policy. There should be a forum for collecting, sharing and up-scaling successful cases. The National Gender Resource Centre could therefore develop a best practice data bank on the lines of the UN solution exchange. A few examples of successful attempts made by the NGOs are discussed below. These can be evaluated and replicated.

4.1 Innovation in Production Practice

Agriculture Techniques

Prayas has undertaken efforts to make 'marginal' lands viable. It has introduced some innovative field techniques in the Konkan region of Maharashtra. Through field trials over a period of three years it has shown that sustainable cultivation of small plots of land is economically viable. The underlying principle is to move towards 'low external input and sustainable and intensive cultivation'. The emphasis on organic methods of cultivation is mainly to reduce input costs and therefore cash requirements for the poor households.

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⁴ This section of the report has been prepared by Alka Parikh with inputs from Maithreyi Krishnaraj, Vibhuti Patel, Aasha Kapur Mehta, Amita Shah, Revathi and a large number of people who responded to a query on the UN Solution Exchange.

Adopting sustainable (mainly organic) methods, decreases inputs costs considerably, and enables the cultivator to earn a fair income. The average productivity (across five vegetable crops) in SHP was 92 Kg/Guntha (1 Guntha = 1089 square feet). The following table summarizes the results of the Prayas initiative:

Table 1: Summary Results of the Prayas Initiative in Sustainable Small Plot Cultivation in Konkan Region of Maharashtra State

Guntha =	Production costs in	Production	111	Expenditure	Income	Labor In Days	Return on Labor - Rs/Day
Small Horticulture Plots (SHP)	822	300	3000	825	2175	42	52
Back Yard Garden (BYG)	11140	546	5460	1140	4320	90	48
Total	1962	846	8460	1965	6495	132	49
Rounded to nearest hundred		850	8500	2000	6500	130	50

Agricultural scientists like MS Swaminathan see a great future for bio-technology. One new discovery is the use of fly-ash from thermal plant as fertilizer. Tried in Nashik district 15 to 20 % rise in yields of soy, banana and cotton was noticed.⁷⁵

AnarDe, working in various parts of Gujarat also has experimented with many agriculture enhancement programs. One very successful and remunerative program initiated by them is cultivation of mangos and cashew nuts. They have shown that intercroppring with these trees is also possible, to diversify risk. They have also started vermicomposting for women. At present, 1,575 women are taking advantage of this program, earning Rs. 2000 each. The success story in the context of cultivation by women was of mushroom cultivation: AnaRDe members have earned Rs. 13,000 each in a year, with 1,160 women participating in the exercise. Farmer families have been involved in flower cultivation. For certain crops, farmers earned upto Rs. 38,000. Tissue culture has generated income of about Rs. 18,800 per farmer.

Collective farming

Sewa organized the landless women agriculture workers into a co-operative to cultivate wasteland. It was a major struggle to acquire wasteland from the revenue department. It took the women 2.5 years to get it. Once they acquired it, the women systematically planned how to make optimum use of the available land. Taking the technical assistance of Gujarat Agriculture University local station, they used environment friendly

agriculture practices, including horticulture, agro-forestry, drip irrigation, compost pits, and rainwater harvesting. The cropping pattern was designed appropriately to enrich the soil. The co-operative made profits of Rs.97,120 in the year 2005, earning more than Rs. 2,000 per member.

The activity of nursery raising is now accepted as an alternative source of employment for agriculture workers. Ten years ago, when SEWA entered this field first, women were growing only non fruit tree plants but at present 70% are fruit plants. Earlier they used to sell only saplings but now they raise seedling and prepare graft. In last five years, 1,527 members are raising 61,06,000 sapling and earned an income of Rs. 44,77,348 (around Rs. 3,000 per person). They also created a revolving fund of Rs 7,07,662.33 for their nursery raising activity. To minimize the costs, some mahila mandals have started collecting their own seeds. The pulp of fruits like amla, mango and lemon is processed and sold in the market.

The Deccan Development Society has organized women to implement a food security programme with 2,000 women, whereby they grow local food, store locally and consume locally. This has created food security for dalit women and improved the nutritional status of women, children and men. Low input agriculture is practiced with use of biofertilizer, including vermi-compost, non-chemical approach to pest management and maintaining complete control over their seeds.

In a related experiment by Deccan Development Society in Andhra where the 'sangams'-women's collectives-i) improved 6,000 acres of degraded land ii) dalit women took cultivable land on lease iii) organized their own public distribution of grains with accent on coarse cereals consumed by 65% of our rural population; built grain banks at village level iv) made systematic collection and preservation of seed varieties.⁷⁶

An IFAD supported development project in Tamil Nadu used self help groups to take loans from their own savings plus from banks and 1,571 members leased land for collective cultivation where responsibility for planting, weeding, watering, harvesting was shared.⁷⁷

UNDP, under its women in agriculture projects, which were undertaken in 21 districts spread across Andhra Pradesh, Uttar Pradesh and Orissa, provided resources and opportunities to women's groups to increase and improve their private agricultural land, experiment with a range of farm and off-farm based economic activities, and improve their access to sustainable farm practices, quality seed and inputs. Support was also provided for building rain water harvesting structures, de-silting tanks/ponds and reviving irrigation systems to improve the productivity of the land. Core issues for women in agriculture projects are access to land and working on farms collectively. Hence access to productive assets including land, credit, technologies, inputs and subsidies were made available to women's groups. ⁷⁸

Allied Livelihood Options

Parivarthana has been conducting skill-training programme on vermiculture. The criteria used for selection for training was only interest displayed by the people; it did not matter whether the people actually owned any land. After training was conducted, it was noticed that one woman had put in the effort to learn vermicompost techniques, in spite of the fact that she did not possess any land. She later applied her newly learned technique on leased agricultural land which yielded a good *ragi* crop. Her entrepreneurship was an eye opener to the others in the village. It was shown that the selection of beneficiaries for training should not depend on the criteria of land-ownership.⁷⁹

The first time that villagers from Valsad went to the bank to get loans for bio-gas (used as cooking gas), the bank refused to consider the applications as they were defaulters on IRDP loans. The Valsad milk union then took the risk of giving 35 villagers loans of Rs.3,000/- each, putting in Rs.1,00,000/-of its own money. Technical support for building the bio-gas plant was provided by the Gujarat Agro Industries Corporation. These plants succeeded in providing all the fuel needs of the families. Women had collected fuel wood for four months; this was not utilized at all. At the end of four months, women sold the fuel wood they had collected, and repaid the loans to the Union. The Union was then able to rotate the money to benefit more families, thereby providing 3,200 bio-gas plants in villages where their Union has societies.⁸⁰

To make agriculture sustainable, AnaRDe has also been involved in generating non-farm income opportunities. This was achieved through distributing tools and imparting training. In tsunami affected areas, till the land becomes cultivable again, attempts were made to augment income by distributing a sewing machine and cycle to each beneficiary family. The incomes have increased at least by Rs. 3,000 per month (sometimes just from sewing machines). Cycles were used by the beneficiaries for selling coconut, fish, milk and vegetables.

Another such success story is in a Tamil Nadu village, 65 kilometers from Bangalore. An organization called 'Green Foundation' has established a community gene bank, to propagate and preserve seed diversity. Dry land farming is made sustainable through water conservation, seed banks and participatory plant breeding. Hombalamma, a woman farmer has grown 9 varieties of ragi in her 6 acres of land and has sold 400 bags of ragi.

Women in the SAID program in Madhya Pradesh in Chindwara and Betul districts have sought to restore the balance in their communities through a multi-pronged approach of improving land quality for agriculture; improving water access and availability through small water structure construction and water sharing arrangements; preventing cropping pattern shifts that cause disparities in demands for water and deny food security to poorer households; starting grain and seed banks to enable the communities to manage and control their own produce and negotiate with the traders more effectively; promotion of goat rearing as a supplementary activity for poorer asset-less families; restoration of common lands and community forests for community needs and establishment of norms for this.⁸¹

Cooperative Development Foundation in Andhra Pradesh has rooted the cooperative movement in the rural people in the districts of Warangal, Medak, and Karimnagar of the Telangana Region. This started with farmer's cooperatives for credit, marketing and inputs. The women's cooperatives extended it to provide credit to milk and related products. This worked very successfully to improve their livelihoods.⁸²

4.2 Innovations in infrastructure

Land development / water conservation exercises

Sabarkantha district is a semi arid area heavily affected by soil erosion due to extremely sandy soil. SEWA organized the women agriculture workers/farmers into Sabarkantha Women Farmer's Association. The co-operative has initiated watershed development to check soil erosion. So far 3,000 hectares of ravine land has been reclaimed. In addition, every year 1,17,700 saplings are planted on wastelands. The Association also encourages forming tree-grower societies and starting sapling nurseries. It now has a license to distribute seeds also. The cooperative also works to organize the women into their own SHGs and provides the necessary training for leadership development, awareness generation, and capacity building.

SEWA organized the rehabilitation and relocation of workers, under the name of Sukhi Mahila SEWA Mandal, who were affected by the construction of Sukhi dam near Vadodara district. Under the women agriculture workers' leadership, they implemented land development interventions and installed irrigation facilities. Today 2,000 hectares of land is treated and converted into productive land. 18 bore wells have been made. They also started alternative income generation programs for the suddenly unemployed, including sapling nurseries, poultry units, animal husbandry, mushroom cultivation, and social forestry initiatives. Now the women farmers borrow loan from their savings and credit groups and raise nurseries as supplementary income.

In order to strengthen the major primary occupation, SEWA has initiated Integrated Land and Water Management (ILWM) activities in the dry desert districts of Kutch, Patan and Surendranagar, covering 40,000 small and marginal farmers in 400 villages. The ILWM focuses on integrating watershed development, water harvesting, animal husbandry, Fodder Bank, Grain Bank, Seed Bank, forestry and thereby making agriculture more sustainable. Setting-up village level tools and equipment libraries further augment this. Currently 10,000 hectares of land in 40 villages is being regenerated. In the year 2003, 542 MT of fodder worth about Rs. 19,00,000 was distributed, 52.2 MT of grains worth Rs. 3,13,200 were distributed. From seed banks, 8 kgs of seeds each were distributed to 200 farmers in Patan district.

AnaRDe has been involved in the land development exercises also. It has undertaken integrated watershed programs in eight villages, making concrete dams, levelling of land, undertaking afforestation in the upstream areas, forming SHGs etc. In addition, 57 check dams have been constructed to augment water supply in the villages.

Under UNDP's Community-based Pro-Poor Initiatives (CBPPI) Programme, emphasis was laid on revitalizing local water harvesting traditions and food security related projects such as provision of grain banks. As a result of the work on conservation of water, agriculture was rejuvenated and food security ensured. It has also resulted in higher milk yields per household by two to five litres since green fodder is available throughout the year. Income from agriculture and livestock per family has increased two to three times per annum.

Activism for infrastructure access and use

Dharangrast Parishad working with dam project affected people in South Maharashtra come up with some innovative demands: (a) around 2500 to 3000 ^{m3} of water has to be provided to each household from an assured source as a basic service to meet livelihood needs. Here the movement has stressed the per capita distribution of water, which means that women would have an equal access to the water. (b) Under the new rehabilitation package of Maharashtra, the project affected families are entitled to land in the command areas of the projects that have displaced them. The movement has demanded that these lands be given in joint names of the man and the woman of the household. This has already been implemented in some of the villages in Satara and Kolhapur districts. (c) The land is supposed to be provided in irrigated tracts. The movement demanded that till irrigated water is given, the government has to pay the difference in income between irrigated and unirrigated lands. After intense struggle, the government has agreed to pay Rs. 600 as *pani bhatta* to each farmer family.⁸³

Singamma Srinivas Foundation made budgets by involving women elected representatives of the PRIs in Karnataka. SSF has focused on special programmes targeting women in terms of estimating differential impact of expenditures across all sectors and services - gender disaggregated impact on literacy, school drop outs, mortality, morbidity, starvation deaths, nutrition, illnesses and reviewing of equal opportunities, policies and opportunities in the public sector-jobs, school education, wages, health care, skills, technical training, computer education in the rural context. 84

Monitoring of Watershed development and other rural development schemes by MKSS in Rajasthan aided by Right to Information Campaign.

MASUM from Pune district has launched a successful campaign to ensure joint pattas for women and men and land-rights of female headed households.⁸⁵

In AP there are experiments under Indira Kranti Pathakam (IKP) implemented by Society for Elimination of Rural Poverty (SERP) to provide access to land for the women. The SERP is facilitating the process of purchasing land and distributing land to the women in their names-confirming land rights to women.

4.3 Innovations in Delivery System

Insurance sector:

Since 1992 SEWA has developed its own insurance unit to reach the poorest, VimoSEWA, as a financial-cum-social protection service for its rural members. With an annual premium of Rs. 270, the members and their families are given life insurance cover of Rs. 5,000 in case of natural death and Rs. 40,000 for accidental death. The insurance cover also includes Rs. 2,000 as mediclaim and Rs. 10,000 for asset loss. Some other versions of the scheme include maternity benefits, dental expenditure and hearing aid. 1,48,810 members are registered for this scheme.

AnaRDe foundation has started a life insurance program with ICICI as their partner. According to the government regulations, for a private firm to be in insurance business, 18% of their policies have to be in rural areas. Thus it is in the interest of the bank to be in this kind of project. The bank spends about Rs. 750 for each policy, while the premium is just Rs. 50. Thus the bank gets back very little, but they get to retain their license. AnaRDe reports that there have many touching moments when a cheque of Rs. 5,000 was offered to a distraught family, after a sudden death of their family member.

Swayam Shiksha Prayog has started a community based health insurance plan, Sakhi. Members typically pay an annual premium of Rs. 100. Program benefits include reimbursements for hospital expenses of Rs. 5,000, community-level outpatient delivery (OPD) services, discounted rates and various health education workshops and programs. Realising that people need doctor's services more often than the hospitals, SSP also arranges for bi-weekly visits of doctors in the villages where the treatment is offered at subsidised rates. In 2006-2007 Sakhi Health is expected to reach 3,000 women and their families in Maharashtra. Plans are underway to expand coverage in 2007 to Gujarat and Tamil Nadu.

Marketing:

Economic associations promoted by SEWA in different districts have come together and formed their own women's marketing network—Sewa Gram Mahila Haat (SGMH). SGMH provides integrated marketing services to the rural producers through exploring, developing & establishing first the internal (local market) and then the national market for produce of informal workers. It also provides awareness and education and latest developments and thereby built capacity of members. The essence is to strengthen the rural economy through rural procurement and rural distribution. For every rupee of sales nearly 90 paisa goes back into the rural economy itself. The focused areas are agriculture, salt, gum and handloom and handicraft. Since 1999 SEWA has been running a shop in APMC. Here the growers bring their vegetables to the shop and sell directly to the vendors, who are members of SEWA. Thus the vegetable growers and vendors are directly linked. Currently 4,000 kg of vegetables worth Rs. 20,000 to 25,000 are sold per day. The shop also runs a collection or pick-up van, which collects vegetables from the growers and brings it to the market.

Swayam Shiksha Prayog has started a retail supply chain since November 2005 across 50 villages. The procurement is made directly from the agricultural producers, and the women entrepreneurs belonging to SHG network supply these to the consumers, who

place their orders with these women. It leverages the bulk buying power of over 3,000 households currently so as to procure goods at a lower cost. SSP plans to start women's groups as local support agency for information, market intelligence, cropping and market updates, micro finance for inputs such as seeds and fertilisers, capital investment in irrigation infrastructure, agro services and initiate innovative financing schemes for ensuring a safety net to the poor rural consumers linked to their staggered, irregular income generation opportunities.

Service delivery leading to women's empowerment

Midday Meal Scheme in Tamil Nadu involves local women in implementing and monitoring its functioning.

A small attempt for technological empowerment of women in agriculture was made under the National Agricultural Technology Project of the ICAR in which all the training interactions were carried out by the ICAR and SAU faculty in the villages rather than in the training centres. The receptivity of women increased enormously by this simple step. ⁸⁶

In parts of Bangladesh, women have taken land on lease through their loans from MFIs. In other places, they have taken control over the management and income from fish ponds from their husbands with capital from MFIs and training in aquaculture. In Andhra Pradesh, India, women in groups have leased land through the money in their SHGs. ⁸⁷

The Lakshmi Ashram in Kausani makes cheap and light sickles and women find these extremely useful. Additionally, the government has commenced promoting 'kisan credit cards' pro-actively at least in parts of Nainital district. A simple recommendation that at least 50% of the cards should be issued to women will go a long way in altering the mindset that a "kisan" is essentially a man.⁸⁸

TOR 5: To review and access the availability and utility of gender-disaggregated data on women in agriculture and suggest measures for effective generation of needed data.⁵

5.1. Context:

While the issue of `invisibility' of women's work is all pervading, it bears special significance in the context of primary sector. This is not only because a majority of women workers in India especially, in rural areas, are engaged in this sector, but more importantly because the work in agriculture and allied activities is closely interspersed with their lives, where the dividing line between `work' and `non-work' becomes increasingly blurred.

The recent writings by both- academicians and activists/ practitioners have led to a fairly clear recognition of the fact the `Face of Indian Farmer is that of a Woman'. This is not a small achievement, especially in the wake of continued under enumeration of women workers in the sector. But this amounts to only half battle won. The real challenge is to portray the face of women farmer, which is confident, dynamic and prosperous. The statistical system in India is yet to respond to this challenge.

5.2. Issues:

Basically there are two sets of problems facing the Indian data system. The first refers to the widely discussed issue of under counting of women workers especially, in households farming, livestock, forestry etc. (For details see, Appendix 5.2). The second, and perhaps, more enduring issue is that the data system provides a dis-jointed picture of workers and production in the primary sector. This has special significance from the gender perspective. For it is the production, rather than work *per se*, which has a more important bearing on some of the critical issues addressing gender and development, within which women's empowerment is shaped. Besides these two, there is the generic problem of disaggregation, periodicity and comparability of estimates.

It is therefore, essential that the data system capturing women's work, simultaneously reflects on issues like:

- what comes out of the work carried out by women and men;
- who decides the division of work:
- what are the conditions within which the work takes place; how are the benefits shared and controlled;
- what is the perceived notion of autonomy;
- to what extent does poverty (or economic well being) impinges on women's work burden;

⁵This section of the report has been prepared by Amita Shah and draws heavily on the inventory of data prepared by Mr. K. Prasad Rao (Appendix 5.1) DDG, NSSO, a member of the sub-group and the inputs provided by other members. The inventory presents a fairly comprehensive view of what is available in the official data system especially in the various rounds of NSSO and the Population Census Surveys.

• what kind of institutional mechanisms, including property rights regime, are associated with the autonomy and poverty reduction.

5.3. Recommendations

Given this backdrop, we propose to make two sets of recommendations: First pertains to the overall requirement for improving gender orientation in the data system; and second pertains to the issue of evolving a holistic picture of employment, production (productivity plus wages), and autonomy so as to be able to locate farming women within her household context. The two sets of recommendations are presented below.

5.3.1. Essential Features of Gender Dis-aggregated Data-base (separate estimates to be generated for female and male):

- 1. Profile of women headed households with respect to circumstances which led to female being the head of the household and autonomy in decision making.
- 2. Enumerate women owner (joint and individual) of various assets especially, land, house, livestock, agricultural equipments, consumer durables.
- 3. Provide separate estimates for livestock (animal farming) in employment surveys along with number of days and hours.
- 4. Combine estimates of employment and production from each activity with agriculture, hunting, and related service activities so as to understand inter linkages between intensity of work, productivity, wages, and poverty. (expenditure) level or BPL status, and IMR, and female literacy at household level.
- 5. Special survey on intra household differential in food consumption.
- 6. Include out-migration with employment estimates.
- 7. Special surveys during droughts/floods in order to ascertain coping strategies, women's role thereof, and impact at household and individual level
- 8. Annual report of the Ministry of Agriculture should provide gender disaggregated data, to the extent available.
- 9. Another survey on indebtedness and preference for farming activity (on the line of 59th round of NSSO) should capture gender differentiated information on borrowing and indebtedness along with the perceptions of male and female members about the preference for farming as the main occupation.
- 10. Time use survey to cover different categories of households-shepherds, fishing communities, forest dwellers, female headed households, cultivating households with and without irrigation.
- 11. Participation in special employment programmes by BPL-status.
- 12. Crop specific estimates for employment, wages, production.

5.3.2 Suggestions for Household Level Data (please refer to item no. 4 above):

It is imperative, in the light of the above recommendations, that the next phase of data collection for rural households may adopt a comprehensive approach whereby information on workers, production, wages, food security and control over assets as well as financial income is collected in a holistic manner. This, in turn, may help capturing

women's economic as well as social status within a household context. Since gender relations are primarily determined within the context of intra-household dynamics, notwithstanding the larger social reality, it is essential that the data set provide information pertaining to at least a minimum set of indicators at the household level. A tentative list of indicators has been presented below.

- 1. Work in different economic activities besides household activities.
- 2. Ownership of basic assets like house, land, and livestock by gender.
- 3. Involvement of men, women and children in collection of fodder, fuel, and water.
- 4. Production of the main food grain crops and milk from livestock.
- 5. Involvement of women and men in marketing of milk, fish, vegetables, and minor forest produce.
- 6. Control over households' total income and that over the income earned by women.
- 7. Decision making process for expenditure on food and clothing, social functions, and the main economic activities.
- 8. Average consumption of cereals, pulse, meat/fish, milk, vegetables, and liquor.
- 9. Current debt exceeding Rs. 2000 and reasons for that.
- 10. Outmigration by sex and duration.
- 11. Use of common property land resources.
- 12. Major shock in the households in the past 10 years.

This is of course, a minimum list of indicators on which information from all households needs to be generated. Besides these, a detailed survey should be designed for special communities and/activities where women traditionally, perform a major role. These communities are:

- 1. Pastoral and other livestock herders
- 2. Forest Dwellers
- 3. Fishing Communities
- 4. Plantation Workers and Vegetable Growers
- 5. Areas that are Prone to High Incidence of Male Migration

The detailed survey focusing on some of the special groups as mentioned above, may incorporate both - quantitative as well as qualitative data. Together, the data set may help in understanding the major dimensions of women's work within the context of gender relationships obtaining at household level.

Appendix 1.1

(Excerpts based on Aasha Kapur Mehta and Sourabh Ghosh, AES 2005 based on Sainath 2004, Patnaik 2004, Anasuya 2004, Sridhar 1998, Deshpande 2002, Reddy 2004, Dinham 2005).

Farmers Suicides: A brief review of the combination of factors that have caused the distress and led to suicides by farmers, especially those growing cotton in Andhra and Maharashtra, is given below

- a. Shift from traditional food crops based farming to commercial farming without adequate technical support combined with withdrawal of the state in the area of Agricultural Extension Services.
- b. Decline in public investment, especially irrigation, in agriculture due to pressure on the fisc...
- c. Low rates of germination of seeds provided by large global firms, spurious seeds and pesticides.
- d. Crop damage caused by pest attacks combined with poor understanding of pesticide use and "the principles of good crop management" led to tragic results as farmers lost crops "after spending scarce resources on pesticides to which insects have become resistant."
- e. Sales staff in shops that sell pesticides "have no training to enable them to advise on appropriate pesticides for cotton pests, nor in how to use pesticides.... The complexity of pesticide application and management has been vastly underestimated."
- f. Debt at very high rates of interest from private moneylenders to sink borewells that failed. The annual rates of interest ranged from 36 per cent to 120 per cent.
- g. Seeds, fertilizer and pesticide dealers are the new moneylenders to a peasantry strapped for credit. The same man advises them on what to buy and then sets the rates for the purchase. The dealers have no scientific qualification and consult the manufacturers.
- h. Humiliation due to forced closure by bank or money lender.
- i. Increase in cost of cultivation and risk.
- j. Cheap imports leading to decline in prices and profits. The high subsidies to cotton farmers in the US and other countries led to overproduction of cotton which in turn artificially depressing world prices. The international price of cotton has been falling. Reduction in tariffs made cotton imports easier and cheaper. As a result domestic prices declined Output prices crashed due to rigged and volatile markets.
- k. Lack of Access to Water. The low water table implies heavy costs for extracting water. There are water lords who control the sources and flow of water. Seeing the benefits accruing to rich farmers, the small farmers too take risks by investing even when their capacity has been severely eroded. This has provided a fertile ground for unscrupulous traders and moneylenders.

Appendix 1.2

Note prepared by Ms Snehlatha Kumar, Executive Director, Rashtriya Mahila Kosh on behalf of Ministry of Women and Child Development (supplementary notes have been incorporated and acknowledged in the text).

- 1. The Majority of the population lives in rural areas and depends on agriculture for its livelihood. Accelerated agricultural progress is, therefore, essential for enhancement of their incomes. Many policies and programmes that Government has implemented since 1947 aim to strengthen agricultural production. However, distribution and delivery remain problem areas. In recent years there has also emerged a trend towards decline in the growth of agriculture. This has now led to a climate of despair among farmers' families. Some areas in Maharashtra, Andhra and Karnataka have been affected by serious agrarian crisis, leading occasionally to farmers' suicides. Therefore, there is an urgent need to address these problems in the Eleventh Five Year Plan.
- 2. The draft Approach Paper to the 11th Plan aims at faster and more inclusive growth, i.e. include the excluded. One of the major excluded categories are women. Looking at the plight of women and particularly of rural women, it is seen that about 80% of the rural women workers are involved in agricultural related pursuits as cultivators and labourers—and the farm house wife often plays multiple roles as producer, cultivator, entrepreneur, worker, consumer and home maker. About 35% of the rural households are estimated to be headed by women. More than 90% of the rural women are unskilled which restricts them to low paid occupations, generally involving immense drudgery. They have no control over land and other means of production, which largely excludes them from access to institutional credit. In hill and tribal areas, men migrate to seek alternate avenues of employment and agriculture is almost completely in the hands of women. Women farm workers are discriminated against in the matter of wage payment due to illiteracy and lack of bargaining power. This has resulted in decline in agricultural production.
- 3. The growth rate of agriculture was about 2 % during the 9th Plan and is slated to decline to 1.8 % per annum during the 10th Plan which has resulted in lack of employment opportunities in the rural areas. Another issue is the ownership of land. Over 60 % households own less than one hectare. Farmers owning over one hectare comprise about 28 % of rural families.
- 4. Recently Government has taken several significant initiatives to reverse the downward trend in agricultural production and to find permanent solutions to the agrarian crisis by introducing the following programmes:
 - i) Bharat Nirman
 - ii) National Rural Employment Guarantee Programme
 - iii) National Horticulture Mission
 - iv) Expansion of agricultural credit

v) Lowering of interest rates etc.

- 6. Although the above initiatives are expected to arrest the downward tend in agriculture production, the Eleventh Five Year Plan should give more emphasis in the area of land reform with particular reference to tenancy laws, land leasing, distribution of surplus land, providing adequate access to common property and wasteland resources, and the consolidation of holdings. Following the conferment of land rights to women under the Hindu Succession Amendment Act (2005), the provision of appropriate support services to women farmers needs to be incorporated in the Act. Joint Pattas for both houses and agricultural land are essential for women to get access to credit. In fact, in tribal areas, given the nature of tribal societies, it may even be advisable to have Pattas in the name of only women. Women suffer from a multiple burden on their time due to their home making, child rearing, and income earning responsibilities. When they work the whole day in fields and forests they need appropriate support services like creches and child care centres. Adequate nutrition is also important. Efforts need to be made to establish Self Help Groups and other women's groups to undertake community activities that help to meet essential gender-specific needs.
- 7. Prime farm land must be conserved for agriculture and should not be diverted for non-agricultural purposes. Giving away prime land affects rural women because it often tears apart family life and destroys a home environment that has been in place for generations. This often makes women vulnerable to crimes like trafficking and bonded labour. The Central government has issued an advisory to State governments seeking to ensure that only barren or wasteland and, at best, single crop farm tracts are acquired for development. Land is not only the means of subsistence and a source of life security for farmers; land owning is also a source of self-respect and dignity in a village environment. It is suggested that whenever such displacement takes place, women farmers should have a participatory role in the negotiations. The farmers should be paid adequate compensation and guarantee of future possibilities of livelihood from the project for which land is acquired by making them stakeholders. They may be offered nonagricultural jobs and social benefits, local public goods like schools, ration at subsidized rate, medical insurance, pension, etc. along with appropriate training and skills in managing their lump-sum payment. Adequate steps need to be taken to enable farmers to adapt to their new lives once their land is acquired. Displaced families need to be provided adequate credit for their rehabilitation and resettlement. The displaced families should also seize this opportunity to move out of agriculture and join new jobs.
- 8. Micro-credit through Self-Help Groups (SHGs) has proved to be a strategic tool for organizing rural women in groups and promoting savings and thrift habits to gain access to institutional credit for their socio-economic development and empowerment. SHGs continue to engage in traditional stereo-typed, low return activities and the fundamental livelihood concern of the rural poor women remains largely un-addressed. Exclusion of the poorest dalits, tribals, minorities and other marginalized communities is an area of concern. The Governing Board of Rashtriya Mahila Kosh (RMK) has approved a concessional package for the NER including Sikkim in order to promote new organizations for easy and timely access of micro credit in remote areas of the region.

- 9. The ownership of livestock is much more egalitarian since resource poor farmer families own a majority of cattle, buffalo, sheep and goats Women play a critical role in the care and management of livestock, but may not have ownership rights, and hence the cooperative model of production needs to be promoted. Women especially need women friendly implements / tools which can reduce drudgery, save time and enhance output and can be handled comfortably. Thus specific training inputs need to be provided for women.
- 10. The existence of barriers related to capital, technology, and notions of women's work mean that, in developing countries women entrepreneurs are overwhelmingly concentrated in the commercial and service sectors rather than undertaking agricultural enterprise. Women in production are generally to be found in small village and cottage industries e.g. in the rural areas, the manufacture of apparel, pottery, leather goods and handicrafts etc where profits are lower than in the medium and large industries. In rural areas, female farmers tend to produce low-return food crops, which are low risk, whereas men are more likely to be in remunerative cash cropping but involving high risk.

Suggestions

- i There should be no collaterals for loans to women. They need special attention because of their lack of land title / collateral.
- ii Shift to crop as collateral instead of insisting on land ownership.
- iii. In the case of women-headed households, they should be classified as cultivators to enable them to get loans and farm equipment.
- iv Kisan Credit Cards should be issued to women speedily with joint pattas to house/agricultural land as collateral. In the absence of these, indemnity bonds / guarantees should be accepted from husband, male relatives and prominent local figures. In tribal areas, given the nature of their customs, title to house/agricultural land should be in the name of women only and not in the joint pattas.
- v SHGs need to be strengthened and qualitatively improved. They should move to non-traditional, non-stereo-type and high return agro-based activities.
- vi Equal emphasis has to be laid on savings. In the absence of savings, the vulnerability of the rural poor especially women to indebtedness would tend to increase.
- vii Micro insurance for risk mitigation of the poor women and crop insurance should be provided.
- viii. There is also a need for a regulatory framework to ensure that the services reach the people who need them. Interest rates charged by Micro-Finance Institutions should be regulated.
- ix Agricultural crops need to be diversified to horticulture, floriculture, organic farming, genetic engineering, food processing, etc. to give enhanced incomes.
- x. Public and private investment needs to be stepped up in agricultural research especially in bio-technology, extension, development of rural infrastructure, irrigation and agro-based and food processing industries.

- xi. Provision of an integrated programme for empowerment of women through a major strategy of converging the services available in all the women-related programmes besides organising women into SHGs for undertaking various entrepreneurial ventures relating to agricultural and allied activities.
- xii. A commitment that the benefits of development from different sectors do not bypass women and the flow of benefits to women in education, health and employment to be regularly monitored.
- i. Traditionally, women have been marginalized. A high percentage of women are among poorest of the poor depending upon agriculture as the main livelihood acitivities.. Livelihood through micro credit for farm and non farm activities are the means to climb out of poverty and could be a effective solution for them to extend their horizon and offer them social recognition and empowerment.
- 11. Thus an integrated approach is required for meeting over-all credit needs of a poor family in terms of backward linkages with technology and forward linkages with processing and marketing organisations. Further, credit needs to be provided for diversified activities including consumption loans and against sudden calamities. Credit in right amount and at right time to farm-women should be ensured for various purposes like income-generating liveli-hood activities, production, housing and other emergency needs of the family. The delivery system has to be proactive and should respond to the financial needs of the farmers.
- 12. The rural sector requires credit policies that lead to the creation of actual productive processes & assets and sustainable institutional development.
- 13. Cooperative Banks and Rural Regional Banks should be strengthened which should formulate new products for diversified & integrated farm & non-farm activities, including insurance, commensurate with the demand & to provide cheaper and timely credit
- 14. There is immediate need of adoption of technology-savvy micro-finance programme in the country to make it more holistic. Special credit packages should be designed for difficult and un-served and disaster prone areas of the country.

Appendix 2.1

Gender Addressal in Agriculture – Erstwhile and Ongoing Initiatives And Future Focus

(Select excerpts from the Note prepared by Neeraj Suneja, National Gender Resource Centre, Agriculture, 2006).

Rural women across all developing countries including India constitute a major and critical work force in agriculture and thus hold the key to the future of earth's agricultural system and to the food and livelihood security. They are major producers of food in terms of value, volume and hours of work. Female population in this country according to 2001 census is 496.5 million (48% of the total population) of which 360.95 million are rural women. According to 2001 Census, there are 37.12% female cultivators as compared to 41.98 % male cultivators in rural sector & 42.95 % female agricultural labourers as against 27.5 % male labourers. If one goes beyond narrower definition of 'productive workers', almost all women in rural India can be termed as 'farmers' in some sense – working as agricultural labourers, unpaid workers in the family farm enterprises or the combination of two.

Policies Perspective & Priorities:

Current:

The National Agricultural Policy formulated in 2000 has highlighted incorporation of 'gender issues' in the agricultural development agenda recognizing women's role as farmers & producers of crops and livestock, as users of technology, as active agents in marketing, processing and storage of food and as agricultural labourers. The policy states that, "Mainstreaming gender concerns in agriculture will receive particular attention. Appropriate structural, functional & institutional measures will be initiated to empower women and build their capacities and improve their access to inputs, technology and other farming resources".

The setting up of National Gender Resource Centre in Agriculture with the following aims, objective & role is an outcome of the policy on this issue.

Aim:

The NGRCA besides undertaking and supporting training, research and advocacy to mainstream gender issues in agriculture aims at forging effective functional linkages with other related departments, agencies and institutions and is mandated to ensure that the policies and programmes in agriculture are fully engendered and reflect the national commitment to empowerment of women.

Objectives:

The National Gender Resource Centre in Agriculture (NGRCA) is a focal point for convergence of all gender related issues in agriculture and is to serve as an epicenter to coordinate and synergize various efforts aimed at women's empowerment though agriculture.

Role:

- (i) Collect, analyze and document information (both from primary and secondary sources) on women in agriculture.
- (ii) Act as a comprehensive **data base** and a clearinghouse to women related policies/issues in agriculture and allied sectors.
- (iii) Monitor and assess the **Gender impact of various on going programmes** of agriculture and allied sector of Department of Agriculture & Cooperation, Ministry of Agriculture and make recommendations on appropriate improvements in their design/strategy.
- (iv) Assess the **gender impact** of agricultural technologies and Research Project on 'women in agriculture', identify/assess the agronomic based drudgery prone activities of women and suggest ways to make these technologies/tools gender friendly.
- (v) Identify & float macro/micro level studies to identify the needs, requirements, potential and constraints faced by women in agriculture sector especially in the areas of technological development, access to inputs, credit and other productive resources, marketing intervention etc.
- (vi) Review the existing laws and other Government decisions/measures relating to basic production resources such as land, water forest and to examine women's access and control over these basic resources and recommend necessary changes to protect women farmers' right to livelihood.
- (vii) Document, scientifically validate and disseminate traditional/indigenous knowledge of women in agriculture and allied sector.
- (viii) Forge effective functional linkages with various departments, agencies and institutions including non governmental organizations and farm women groups; document and disseminate lessons and experiences from on going initiatives taken by these agencies/institutions in sustainable agriculture.
- (ix) Collaborate with Agri. Research institutions to identify technologies/crops/ processes in which women farmers have a comparative advantage and develop a strategy for systematic capacity building on these issues.
- (x) Undertake **preparation of suitable training modules on gender issues** in agriculture which include gender sensitization modules for policy planners and development managers.
- (xi) View the existing policies related to land, water, forests with respect to their impact on women farmers and suggest remedial measures to bring about structural changes, if required.
- (xii) Promote 'action research' on critical issues including women's access to land, water, common property resources, impact of macro economic changes on women farmer and implications of legal and regulatory framework on vulnerable groups such as land less farmers, tribal farm women & those affected by natural calamities.

- (xiii) Organize national level interactions between policy makers/administrators and women farmers to share concern, issues and perspectives and evolve concrete policy recommendations.
- (xiv) Bring out publications on gender related areas/issues in agriculture and allied sector focusing the experiences, efforts and the work from on-going initiatives taken up by NGRCA/other related agencies/institutions.

The X Plan approach Paper of Planning Commission lay emphasis on Radical reforms in extension system as given in Para 3.11, the relevant extracts of which reads as under:

"Strengthening of our agricultural research & development system and a significant improvement in the sophistication of the technology dissemination methodologies are essential to achieving rapid & sustained growth in agricultural productivity. A radical overhaul of the extension service is also needed. Specific measures are necessary to ensure that research, technology development and extension services meet the special needs of women farmers"

Keeping the recommendations of the above policy documents in view, a broad 'Policy Framework for Agricultural Extension' (PFAE) was developed which had following five major guiding elements:

- (i) Reforming Public Sector Extension
- (ii) Promoting Private Sector to effectively complement, supplement and where ever possible to substitute public extension.
- (iii) Augmenting Media and Information Technology Support for Extension
- (iv) Mainstreaming Gender Concerns in Extension
- (v) Capacity Building/ Skill Upgradation of farmers and extension functionaries

In the process of executing these reforms, the States are being encouraged to prepare State Extension Work Plans (SEWP) encompassing all extension activities they propose to undertake. The gender concerns are being mainstreamed by specifying in the cafeteria of activities that minimum 30% of resources on beneficiary oriented programmes and activities are utilized for women farmers and women functionaries.

Further, to implement the concept of 'Gender Based Budgeting' in agricultural programmes, a Gender Budgeting Cell (GBC) of DAC is located in the National Gender Resource Centre in Agriculture (NGRCA). The Divisional Gender Coordinators (DGC) have been identified in all divisions of the Department of Agriculture & Cooperation which are handling Beneficiary Oriented Schemes/Programmes. The Gender dimension have been added to the Performance Budget of Department with a separate chapter on 'Gender Perspective in Agriculture' having been inserted for the first time in 2005-06 in Performance Budget document.

Women in Five Year Plans: Agriculture Sector

Development of women has received attention of the Government right from the First Five Year Plan (1951-56). However, their development was treated as a subject of

'welfare' and was clubbed with the welfare of other disadvantaged groups requiring attention. The Second to Fifth Plans, including the Plan holidays, continued to reflect the same 'welfare' approach, except providing education and selected child & maternal health care services. The Fourth & Fifth Five Year Plans, though, did recognize women's participation in agriculture sector, however, very little was done to improve the knowledge and skill base of women farmers.

The shift in the approach from 'welfare' to 'development' of women could take place only in the Sixth Five Year Plan (1980-85), which forced the planners and policy-makers to recognize women not only as 'partners' but also as 'stake-holders' in the development of the country. The Sixth Plan adopted a multi-disciplinary approach with a special thrust on the three core sectors of health, education and employment. Accordingly, priority was given to programmes on 'women in agriculture' and its allied activities of dairying, poultry, animal husbandry, handlooms, handicrafts, small-scale industries, etc. It was during the Sixth Five Year Plan that Ministry of Agriculture launched a Women Youth Training & Extension Project (WYTEP) in Karnataka with DANISH support.

In the Seventh Plan (1985-90), the developmental programmes continued with the major objectives of raising the 'economic' and 'social' status of women and bring them into the mainstream of national development. A significant step in this direction was to identify/promote the 'beneficiary oriented programmes' for women in different developmental sectors which extended direct benefits to them. The focus on generating both 'skilled' and 'unskilled' employment through proper education and vocational training continued. More projects to provide 'training and extension' support to women farmers were launched by Ministry of Agriculture with DANISH support which included Tamil Nadu Women in Agriculture (TANWA) in Tamil Nadu and Training & Extension for Women in Agriculture (TEWA) in Orissa. Dutch support to address the technological and other needs of women farmers was also solicited during this Plan Period and a special project for 'Training of Women in Agriculture (TWA)' was launched in Gujarat. The Eighth Five Year Plan (1992-97) with major focus on 'Human Development' played a very important role in the development of women. It ensured that benefits of development in different sectors did not bypass women & focused on implementing special programmes aiming at 'economic development of women'. This approach of the Eighth Plan marked a further shift from 'development' to 'empowerment' of women. It was during this period the Central Sector Scheme of Women in Agriculture in selected seven States (one district in each State); Danish supported 'Madhya Pradesh Women in Agriculture' (MAPWA) Project in M.P. & Dutch supported 'Andhra Pradesh Training of Women in Agriculture' (ANTWA) project in A.P. were launched.

The Ninth Five Year Plan (1997-2002) made a major commitment of 'Empowering Women' as the agents of socio-economic change and development and stressed on preparation of 'Component Plans for Women' in every sector of development along with extending the coverage of these women specific programmes.

3. PROGRAMMES

Current:

Extension Division:

The activities of Central Sector Scheme for Women in Agriculture and other externally aided programmes have been subsumed under the scheme 'Support to States Extension Programmes for Extension Reforms'. This scheme aims at:

- (i) providing 'decentralized and demand driven' extension services to the farmers including women farmers through their active involvement in the planning and implementation process. The gender concerns under the scheme are being mainstreamed by mandating that 30% of the resources on beneficiary oriented programmes and activities are allocated for women farmers and women extension functionaries across 252 ATMAs set up/to be set up in all the major States of the country.
- (ii) Introducing gender sensitization aspects in the trainings of Master Trainers/ Facilitators/ Trainers
- (iii) Mandating representation of women in all committees/bodies at District Level viz. ATMA Governing Board, Farm Information and Advisory Centers (FIACs), Farm Women Interest Groups(FWIGs) and Commodity Based Organisations (CBOs)etc.

App. 27,800 Farm Women, out of a total of 95,000 farmers have been benefited under extension activities of the Reforms Scheme during 2005-06.

The gender issues are also being adequately focused under other schemes of Extension Division which are as follows:

'Mass Media Support to Agriculture Extension': The Central Sector Scheme "Mass Media Support to Agriculture Extension" envisages utilization of existing infrastructure of Doordarshan and All India Radio to produce and transmit programmes covering wide spectrum of topics in agriculture and allied fields for bringing the latest information and knowledge to the farming community including farmers/women farmers.

Special programmes are being produced and telecast under the Doordarshan - Narrow Casing programmes to transfer information and technology in areas in which women farmers are pre-dominently engaged such as vermicompost, nursery-raising, seed treatment, floriculture, kitchen garden, gender friendly tools etc. Also under the Doordarshan – National/Regional Agricultural Programmes, the areas of women; interest such as organic farming, vermicompost, nursery-raising, seed treatment, floriculture, kitchen gardening as well as their success stories are included. The existing infrastructure of FM Transmitters of All India Radio is being used to broadcast half an hour Kisan Vani Programme daily, six days a week from Monday to Saturday, from 96 rural areas FM Stations. These FM Stations are also producing special programmes to transfer information and technology in areas of women's involvement.

Establishment of Agri-Clinics and Agri-Business Centres (ACABC): The Scheme is open to all eligible Agriculture Graduates including women. As an outcome of the special efforts During 2005-06, 870 women have been trained as against the total of

9461 (9.02%). Also, 37 trained women candidates have taken up enterprises against 2729 (1.35%) ventures set up across the country.

Extension Support to Central Institutes/DOE: Though, Out of 11 components of Scheme, the gender specific budget is allocated only under one component viz. 'National Gender Resource Centre in Agriculture (NGRCA)' wherein 100% expenditure is made on gender related activities such as undertaking macro/micro level studies; action research on critical thrust areas related to gender in agriculture; developing Gender sensitization modules for programme implementers etc, (through out-sourcing) and developing a separate portal for this Centre, however, under remaining components of the Scheme also consistent efforts are being made to organize training programmes in areas of core competence of women and also improving women's participation in all the training programmes.

A Model Training Course on 'Gender Budgeting' has been organized at MANAGE. The course curriculum and content has been finalized in consultation with NGRCA and Department of Women and Child Development and includes all key areas for gender mainstreaming viz. 'Budgeting for Gender Equity'; 'Concept and Tool of Gender Budgeting'; 'Gender Mainstreaming – sharing of ATMA experiences' etc.

A special Model Training Course for Women Extension Functionaries of Southern Region is also proposed to be organized during 2006-07. The Extension Education Institutes are also being encouraged to organize similar courses for their Region.

Seeds Division: Specific financial targets have been fixed for women farmers under the Central Sector scheme titled 'Development & Strengthening of Infrastructure facilities for Production & Distribution of Quality seeds' under its following components

- Seed Village Scheme
- Human Resource Development
- National Seeds Research & Training Centre (Varanasi)
- Use of Bio Technology in Agriculture & Public Awareness Campaign.

The implementing agencies have been advised to allocate specific amount for women farmers.

Horticulture Division: Women as a work force contribute to the coconut cultivation and its products especially in the making of coir. Keeping this in view, under the scheme 'Expansion of Area under Coconut' being implemented by Coconut Development Board, conscious efforts are made to extend the benefits of the scheme to women farmers. During 2004-05, in Kerala state, 228 women beneficiaries out of a total of 945 were women(24.12%) while in 2005-06, their number is 231 out of a total of 1036 (22.29%).

Under the schemes of National Horticulture Board namely 'Development of Commercial Horticulture through Production & Post Harvest Management' &

'Technology Development & Transfer for Promotion of Horticulture', 174 & 107 women have been benefited during 2004-05 & 2005-06 respectively.

International Cooperation Division: FAO Regional Office for Asia & Pacific decided to honor a model female farmer who had done an exemplary work in the field of 'Heritage/ Conservation Agriculture' on the occasion of World Food Day 2005. The Division has nominated a model female farmer for this purpose.

Machinery & Technology Division: A number of agricultural implements and hand tools suitable for farm women have been developed by Research & Development organizations under ICAR. These gender friendly tools are being promoted through Macro Management scheme. The feedback received from the State Govts. indicates that 20,380 women farmers have been benefited under this scheme during 2004-05.

Under the Central Sector Scheme 'Promotion and Strengthening of Agricultural Mechanization through Training, Testing and Demonstration', the skill development aspect among women farmers has been adequately taken care of by earmarking 10% of the funds and fixing up of separate physical targets for women. Under the 'Training and Testing component', Farm Machinery, Training and Testing Institutes(4) have organized short duration training & testing programmes – both institutional & on site for farmers in the areas of selection, operation, maintenance and management of agricultural implements. A total of 309 women have been trained against the target of 400 during 2004-05 and 217 against a target of 500 during 2005-06.

Though, there are no specific targets for women farmers under 'Demonstrations', however, the women farmers have been actively made to participate in the demonstrations (app.3000) organized during 2004-05. During 2005-06, 961 demonstrations have been organized in the farmers' fields including the fields of women farmers. The State Governments have been requested to earmark 10% of the funds for women and furnish their reports separately on gender disaggregate basis.

Under a new component 'Outsourcing of Training' to train large number of farmers in nearby places, despite there being no separate targets for training of women, the State Governments have been requested to earmark 10% of the funds under this component for training of women farmers.

Integrated Nutrient Management (INM) Division: As per the guidelines of 'National Project on Organic Farming (NPOF)', there are no gender specific activities/allocation. However, 25% seats for training of farmers on organic farming have been reserved for women farmers.

Technology Mission on Oilseeds & Pulses (TMOP) Division: There is no separate provision for women farmers. However, under the NOVOD Board's schemes on 'Integrated Development of Tree Borne Oilseeds', the implementing agencies have been advised to ensure maximum participation of women in the programme.

Plant Protection Division: Under the scheme 'Strengthening and Modernization of Pest Management Approach in India', there is no separate provision/budget allocated for women. However, under the sub-component 'Integrated Pest Management', the Farmers' Field Schools are organized in collaboration & support of the State Govt. on different crops in which women farmers actively participate in the training activities / programmes.

Natural Resource Management (NRM) Division: Under the 'Watershed Development Project in Shifting Cultivation Areas (WDPSCA)', there is no specific component exclusively allocated for women farmers, however, under the scheme 17.5% of the total allocation is earmarked for rehabilitation component which enables the beneficiaries to take up agriculture & allied activities such as production of short duration crops like banana, papaya, etc.; Animal Husbandry/ Piggery/ Poultry/ Duckery/ Purchase of milch cows; Pisiculture; Sericulture – Plantation of mulberry, Supply of mulberry seed worm; & House hold activities --Basket/Rope/Mats making, Tailoring, embroidery, Carpentry, black smithy, Small house hold food processing units, Cottage industries and many other activities suitable to the locality with the approval of the DWDC. These activities are mainly done by women.

Rainfed Farming System (RFS) Division: Under the 'National Watershed Development Project for Rain fed Areas (NWDPRA)' which has been subsumed under Macro Management scheme, there is active participation of women in different activities. In Watershed Development Team (WDT), one out of four members is a women; Each Watershed Committee has two women members to facilitate active participation of women in the programme. The women oriented Users Groups (UGs) are formed at each watershed. Also, for income generating activities, exclusive women SHGs as well as general SHGs with adequate participation of women are formed.

Agricultural Marketing Division: Under the scheme 'National Institute of Agricultural Marketing', the provisions have been made to organize training programmes for women in the field of modern marketing system, export of horticulture produce from north-east, orientation of SHGs for women during 2005-06 and 2006-07. While, it is not possible to make women specific allocations in view of the scheme being demand driven, however, as and when the project proposals from women entrepreneurs are received, they are processed on priority basis.

Agriculture Census Division: The 'Centrally Sponsored Scheme for Agriculture Census' involves statistical operations. As such, it has not been possible to fix any target/allocation for women in the scheme. However, the Division has collected, collated & documented the data on 'operational land holdings and land use pattern' on gender disaggregate basis in its Agriculture Census conducted during 1995-96.

Macro Management Division: The Centrally Sponsored Scheme-Supplementation/ Complementation of States efforts through Work Plans (Macro Management) is a step towards achieving decentralization in pursuance of restoring primacy of states in agricultural development planning. Since, the scheme is being implemented through the Work Plan being prepared by the states themselves, there is no separate allocation of funds for women farmers from DAC. However, some states themselves have provided funds for the benefits of women.

Appendix 2.2

Gender Concerns to be met through Agricultural Extension in the XIth Five Year Plan

(Selected Recommendations shared by Dr. Geethakutty)

- 1. The various and distinct categories of farm women in the country are to be targeted through separate schemes and approaches of betterment and empowerment.
- 2. Gender mainstreaming should be taken up holistically with its complete conceptualization i.e. ensuring that all general measures and situations of development openly and actively take into account their effects on the respective situations of women in comparison to men.
- 3. To effect gender mainstreaming, strong institutional frame work is to be built up through out the country. The existing NGRCA structure, the Gender Budgeting Units etc. currently functioning as isolated units in MOA should be converged together and expanded to function as a single Directorate of Gender and Agriculture under the MOA.
- 4. Understanding of the gender roles performed by the farm women and the needs and constraints the women face in field should be addressed through farm women specific extension programmes of technical capacity building, promotion of women friendly technologies, evolving new or modifying existing technologies as appropriate to farm women, and through women focused technology dissemination in the field.
- 5. New *modus operandi* and reforms in functioning of small and local market and crop based co-operative markets are to be brought in so as to increase market access among farm women to avoid the existing middle person exploitation, distress sale and preseason selling crop etc. and input market prevalent among farm women. Farm women support agencies like Rubber Producer's Society Service (RPSS) of Rubber Board, Kottayam and the Kerala Horticultural Development Project's Farmer Co-operatives Markets are models which could be scaled up.
- 6. Welfare programmes for labour pension, insurance etc. should be made gender sensitive to consider, reach and include women farm labourers also as beneficiaries.
- 7. Structural and functional flexibilities in the conduct of the *anganawadies* should be brought to suit the work pattern and timings of women farmer labourers in various regions.
- 8. Along with increased number and focused capacity building programmes targeted to farm women of the various sectors on identified needs, focus and

- budget for building necessary infrastructure facilities like hostels, toilets, day care centers, creches, mid day meals etc. for institutional training should be provided.
- 9. New programmes, modified schemes and gender sensitive criteria in existing programmes to increase the ownership and access of farm women to common property resources, natural resources and production assets land, water, lakes, forest, grassland, wasteland etc. should be introduced in agriculture, animal husbandry, fisheries sector, waste land farming programmes, watershed development programmes, NRM projects and biodiversity programmes.
- 10. Campaign programmes for creating awareness among farm women on IPR and Biodiversity Act, and Farmers Rights should be planned and budget provision be made. 2.22 Socio cultural barriers of rural areas, especially in the north and north eastern region of the country affect effective implementation of extension programmes by male extension functionaries among farm women
- 11. Preference for promotion of lady professionals to the decision making position in the administration is also to be introduced. Special in-campus HRD programmes also should be introduced for capacity building and empowerment of lady extension professionals in all sectors of agriculture.
- 12. Bring schemes and criteria for including and recognizing women farmers as model farmers, contact farmers, demonstration farmer etc. and highlight and recognize successful farmwomen through awards.
- 13. Introduce gender impact assessment as compulsory criteria of evaluation of all programmes and projects and ensure that definite and concrete short term and long-term indications are included in evaluation guidelines.
- 14. The *Panchayath Raj* Institutions should be mobilized as basic platform wherein the various women oriented programmes; scheme funds, institutions, agencies etc. can be integrated and implemented meaningfully. Capacity building on gender sensitivity among *Panchayath* level functionaries also should be introduced through the Department of Local Self Government.
- 15. At district level, ATMA like bodies should be enabled to integrate the various programmes of women development implemented through various agencies.
- 16. The right perspective of the gender roles, needs, constraints and the needs of the potential farm women entrepreneurs of the various sectors, class, and caste in an agro eco zone are essential among the programme participants in this regard. To mainstream gender in the conduct of the ATMA and related activities, a training unit of gender mainstreaming is to be built in each SAMETI with a strong team of experienced faculty of gender and agriculture.
- 17. The main Working Group of Agricultural Extension is requested to consider the gender mainstreaming concerns as a cross cutting theme and to incorporate the relevant changes recommended towards engendering the recommendations of the group.

Appendix 4.1 - List Of Improved Agricultural Equipment Developed For Women In India

Operation	Traditional	Improved Technology		
Field proporation	Technology Spade	Simple hand tools/newer neeks for seed		
Field preparation In hilly areas	Space	Simple hand tools/power packs for seed bed preparation		
Sowing/planting	Hand dropping,	Improved multi-row drills for		
Sowing/planting	pushing seedling in	seedling/fertiliser application		
	mud	Rotary dibblers, jab planter		
	muu	Manual seed drill/seed cum fertiliser drill		
		Animal and power operated seed cum		
		fertiliser drill		
		6 row rice transplanter		
Fertiliser	Manual broadcasting	Fertiliser broadcaster		
application				
Weeding/hoeing/	Khurpi, kudali, spade	Manual weeder, wheel hoe, garden rake		
thinning				
Irrigation	Flooding	Sprinkler and drip irrigation system		
Spraying/dusting	Hand sprayer/duster	Hand operated/foot operated sprayer with		
	without safety devices	safety devices		
Harvesting	Sickle	Serrated sickle,		
		self propelled reaper of I m size		
Threshing	Manual beating	Mechanical power thresher		
	Bullock treading	Pedal operated thresher		
D	** 1	Strippers		
Preparation of soil	Hand	Power operated hammer hills		
and filling of		Hand scoop for filling poly bags		
polybags	D1	XX/		
Watering	Bucket and mugs	Wheel berrow for bringing water		
Danning /hydding/	Local Imirros shaams	Wheel barrow for bringing water		
Pruning/budding/ grafting	Local knives, shears	Improved horticultural tools		
Pit digging	Khurpi, spade	Augers and post hold diggers		
Seed treatment	_	Manually operated seed treatment drums		
	with chemicals			
Cleaning/grading	Manual using cleaning	Hand/pedal operated cleaners for		
	basket/wire screens	grains/seeds		
		Manual power operated cleaners,		
		Winnowers		
Daving	Cun devina	Power operated graders		
Drying	Sun drying Drying in cribs	Solar dryers Oil fired batch dryers		
	Drying in cribs	Oil fired batch dryers Power operated dryers		
		<u> </u>		
		Agricultural waste fired dryers		

Storage	Local storage structure	Metallic storage structures
2000	made of clay, straw,	
	bamboo, etc	
Milling	Hand mortar and	Pedal operated grain mill
	pestle	Power operated grain mill, dal mill
	Foot operated Dhenki	Wet grinder
	Hand operated stone	
	grinders	
Parboiling	Using cemented tank,	Parboiling equipment
	metallic kettles and	
	traditional methods of	
	sun drying and milling	
Puffing and	Using earthen pot,	Rice puffing machine
flaking	karhi, stirrer, broom,	Flaking machine
	basket, oven, dhenki	
	for milling	
Shelling, de-	Manual	Manual and power operated de-hullers
husking,	Knife.spike	Decorticators
decortications		Hand shellers
Oil expression	Ghani	Portable power ghani
		Table oil expellers
		Screw expellers
Peeling, pulping,	Knives, spikes etc	Manual and power operated peeler and
slicing, polishing	** 1	slicer
Grinding of spices	Hand operated	Mills/pulverisers (power operated)
	pounder	
Cream separation	Hand operated churns,	Power operated churns, khoa machines
from milk, khoa	manual methods	
making	D 111	
Pappad making	Rolling pins	Hand/pedal and power operated presses
Leaf cup plate	Manual	Power operated machine
making		

Source: Gajendra Singh, Gyanendra Singh and Nachiket Kotwaliwale (1998) Mechanisation and Agro-Processing technologies for Women in Agriculture, Paper presented at the AIT-GASAT Asia Conference (August 4-7, 1998) as cited in Rasheed V Sulaiman, Tahseen Jafry and M S Ashok, Cafeteria for Women in Agriculture, NCAP Working Paper 4, March 2003.

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Appendix 5.1

A brief note on availability of data on Gender issues in Agriculture prepared by K Prasad Rao, DDG, NSSO

The availability of data on gender issue in Agriculture at the sub aggregated level is discussed in the succeeding paras. For this purpose, the activities of agriculture as grouped in the National Industry Activity classification 2004 is used. Broadly Agriculture is divided in to the following activities

Division 01; Agriculture, Hunting and related service activities

,	\mathcal{C}
011	Growing of crops; market gardening; horticulture
0111	Growing of cereals and other crops nec
0112	Growing of vegetables, horticultural specialties and nursery
	Products
0113	Growing of fruit, nuts, beverages, and spice crops
012	Farming of animals
013	Growing of crops combined with farming of animals etc
014	Agricultural and animal husbandry service activities etc
015	Hunting, trapping and game propagation including related services
Division 02:	Forestry, logging and related service activities
Division 05:	Fishing, Operation of fish hatcheries and fish farms; service activities
	incidental to fishing

Each four digit level is further subdivided in to five digit levels in some cases.

2. Mostly the data on gender issues in Agriculture is collected in the form of censuses and sample surveys by the line Ministries. Source wise details are described below. Data deficiencies if noted, pointed out, raised by any user, institution are also recorded.

Agencies involved and concerned publications in which gender statistics are prominently disseminated

- 3. The main agencies involved in the compilation of gender statistics are :
 - (i) Central Statistical Organisation (CSO)
 - (ii) National Sample Survey Organisation (NSSO)
 - (iii) Registrar General & Census Commissioner, India
 - (iv) Ministry of Health & Family Welfare
 - (v) Ministry of Labour
 - (vi) Ministry of Human Resources Development in respect of educational women & child development, gender, nutrition etc.
 - (vii) Ministry of Social Justice & Empowerment in respect of disabilities.
 - (viii) Ministry of Environment & Forests
 - (ix) Ministry of Rural Development

- (x) Ministry of Urban Development
- (xi) Ministry of Home Affairs for crime related statistics
- (xii) Planning Commission for development indicators
- 4. The major publications, where the gender statistics are being published, are as follows:
- (i) Statistical Abstract, India
- (ii) Population Census of India
- (iii) Sample Registration System
- (iv) Selected Socio-Economic Statistics, India
- (v) Women and Men in India
- (vi) Health Information of India
- (vii) Rural Health Statistics
- (viii) Family Welfare Programme in India Year Book
- (ix) Indian Labour Statistics
- (x) Indian Labour Year Book
- (xi) Indian Labour Journal
- (xii) Compendium of Environment Statistics
- (xiii) National Family Health Survey
- (xiv) Selected Education Statistics
- (xv) Education in India
- (xvi) Sarvekshana
- (xvii) National Human Development Report
- (xviii) Crime in India
- 5. There are other organizations in India who are seriously concerned about gender-responsiveness. This includes the efforts made by the Department of Women & Child Development, who brings out gender-responsive data through their publication entitled, Women in India although it is not brought regularly. Similarly the National Crime Record Bureau is also attempting to improve its statistics of crime against women.

Population Censuses

6. Office of the Registrar General and Census Commissioner of India conducts once in every ten years population census in India since 1872. The latest was done in 2001. Vast amount of data is collected in the census. Data on Work force participation rate with Rural/urban break up, gender break up for each state is collected and presented in the tables Census of India 2001.. For this purpose workers are divided into cultivators, agricultural labourers, household industry workers, ofther workers. The comprehensive Household Schedule which replaced the individual slip had three parts and two sides A and B. Part I contained the Location Particulars; Part II related to the Individual and Part III contained questions for Household engaged Cultivation/Plantation. Data on village wise amenities, housing conditions and amenities and assets available in the households etc. are collected along with the population data. Cross classification of data with indicators such as social group, facilities/amenities available, economic activity characteristics educational status, etc shall provide good information for policy makers. Data is available both in hard and soft form and easily accessible.

7. Population censuses are often conducted during slack periods of agricultural activity using short reference periods (one day). Therefore, they are likely to omit persons such as migrants and women, who may be active during peak agricultural seasons, from the economically active population. This deficiency is to be taken note of.

17 Agricultural Censuses and surveys

- 8. The Agricultural census is conducted by the M/O agriculture using the State Machinery. The first was done with reference year 1970-71 and so far 7 agricultural censuses were conducted on quinquennial basis and eight one is in operation with the year 2000-01 as the reference year. Through the Agricultural censuses and surveys, very comprehensive structural data is collected on the operational holdings by different size classes and social groups etc. It provides information on the area, gender and social group of the holder, irrigation status, tenancy particulars, cropping pattern, input use across various crops etc and size group of holdings etc. The results are available in website of the Ministry. However, Agricultural censuses normally do not provide data on household labour force participation and on the role of household members in the agricultural holding. They usually focus on the basic characteristics relating to production technologies and land use.
- Overall, these data can be used as a framework for conducting further sample surveys for extension support programmes; for drawing up research plans in the development of gender-specific agricultural technologies for specific crops and a specific holding size/mix (a combination of land and livestock) and that support secondary activities (that could for raise the living standards of agricultural households). The value of these data could be further enhanced by grouping into agro-climatic or agro-ecological zones.

Livestock censuses

10. Ministry of Agriculture, Department of Animal Husbandry, Dairying and Fisheries; AHS Division conducts regular live stock censuses. Conducted once in five years. Till date 17 censuses were conducted. 15th October of the year in which the census was conducted is generally taken as the reference date for the census. All states participate in the Census operations. These censuses give age wise, sex wise data on number of animals, various types of implements and fishing statistics. District wise, species wise livestock data, etc is available from the censuses. The data at sub-aggregated level for the earlier censuses was available on the Ministry's website. Plan to conduct 18th Live Stock Census is under finalisation. There are three schedules generally canvassed under livestock census. Schedule-1 gives general information on households residing in a village/ward under enumeration. Village and ward profile is canvassed in schedule-2. In schedule-3 live stock census is undertaken. Part-1 of the livestock schedule is for general information of the household, Part-2 on livestock, Part-3 on

fisheries statistics. In part 3 of the schedule, the details of members of the households bysex and number of members engaged in actual fishing activities and fishery related activities with male/female breakup and full-time/part-time breakup is available. However, the same type of information (Gender Wise) is not available for live stock households.

Time Use Survey statistics

- 11. India has undertaken a pilot Time Use Survey during 1998-99 with a view to assess the contribution of women and men in the economy through their paid work as well as unpaid household work and to study the gender discrimination in the personal and leisure activities. It was conducted in 18,591 households spread over 6 selected States namely, Haryana, Madhya Pradesh, Gujarat, Orissa, Tamil Nadu and Meghalaya. Various activities involved in the survey were handled and coordinated by the Social Statistics Division of the Central Statistical Organisation of Ministry of Statistics & P.I. The field work of the survey was done during July, 1998 to June, 1999 with the help of the staff of the Directorate of Economics and Statistics of the participating States. The field work was spread over one year to take care of seasonal variation in the activity patron of the individual.
- 12. This Survey with its size and coverage is first of its kind, not only in India but among all the developing countries. For the purpose of this survey, a new classification of activities was developed, taking into consideration the peculiar socio-economic conditions in the country. A publication was brought out giving various operational issues arisen in conducting the pilot time use survey in India, household characteristics of the surveyed population, background statistics of the respondents, and time use patterns of respondents. Voluminous data was made available on gender participation in various activities related to Agriculture with state wise results on most of the activities. The results of survey have highlighted that a significant amount of work both paid and unpaid being done by households especially by women, which have not been taken into accounts under the national income. Further, gender bias in the amount of time spent on personal and leisure ativities is clearly evident from the results of this survey.

Some of the highlights are as given below

1. Overall about 10% households in rural areas and 9% in urban areas were headed by women. The proportion of such household was highest in Meghalaya followed by Tamil Nadu. Though Meghalaya is a matriarchal society, maximum of only about 29% households in urban areas were female headed. There was not much difference in the proportion of female headed households among Scheduled Castes, Scheduled Tribes and other social groups taking all the six states together. About 29% of the female headed households were single member households. The survey results show that about 23% households in rural areas and 21% in urban areas were in the highest monthly per capita expenditure class (mpce) of more than Rs.560/- in rural and

Rs.1055/- in urban areas. About 18% households in both rural and urban areas were having mpce of less than Rs.300/- and Rs.490/- respectively.

14. It was observed that women spend about 2.1 hours per day on cooking food and about 1.1 hours on cleaning the households and utensils. Men's participation in these activities is nominal. Taking care of children is also one of the major responsibilities of women, as they spend about 3.16 hours per week on these activities as compared to only 0.32 hours by males.

In case of personal hygiene too, men spend 1 hour more than women. In the states of Haryana, MP, Gujarat, Orissa, Tamil Nadu and Meghalaya – men spend much more time than women in reading newspaper, listening to music, smoking and drinking intoxicants and physical exercise. Men and women spend almost 1 hour per day in gossiping and talking and ¾ of an hour per week on meditation.

National Sample Surveys

The National Sample Survey Organisation conducts periodical multi subject integrated household sample surveys on various Socio Economic subjects with a ten year cycle. Surveys like Land and Livestock holding, Debt & Investment surveys, Social Consumption (Health, Education etc.), Manufacturing & Service sector enterprise surveys in the unorganized Sector, Farmer Situational Assessment surveys, Employment and Unemployment surveys and Household consumer Expenditure surveys undertaken by the NSSO periodically give lot of gender specific data in Agriculture and with cross classification of household type, ownership type, expenditure class educational standard etc. The Employment and Unemployment survey conducted quinquennially by the NSSO is one of the important sources of data on employment situation in the country. In this survey, detailed data were collected to elicit information on labour force, workforce, unemployment, underemployment as well as labour mobility according to various household and population characteristics. All states and UTs, were covered by these surveys. The wage differential data by sex for each activity in both the agricultural and non Agricultural categories is collected. In Agricultural activities, detailed data for each manual work in cultivation and other manual work in Agricultural activities other than cultivation is also collected and presented in Tables released State wise data with ruralurban break up, male-female break up is available. Main advantage of this data is that regular surveys are being conducted on the same subject and time series data is available. Cross classification of indicators like female headed households, educational status, expenditure classes, activity wise distribution and average wage etc could be attempted with the unit level data easily accessible.

Highlights of Employment & Unemployment survey 61st round

17. The employment and unemployment survey was (latest one is in 61st round in 2004-05) generally spread over 7999 villages and 4602 urban blocks covering 79306 households in the rural areas and 45374 household in the urban areas.

- 18. As per the data collected, about 42% of the population in the country were usually employed, the unemployment rate was 1.7% in the rural areas and 4.5% in the urban areas. The unemployment rates for the females was found to be higher than that for the males, and highest among the urban females.
- 19. About 11 per cent of households in both the rural and urban areas were headed by females. Compared to all households, they had, on an average, a relatively smaller household size.
- 20. According to the *usual status* (ps+ss), about 56 per cent of rural males and 33 per cent of rural females belonged to the labour force (both employed and unemployed persons). The corresponding proportions in the urban areas were 57 per cent and 18 per cent, respectively.
- 21. The gender differential in the worker population ratio (WPR) was distinct: 55 per cent for males and 33 per cent for females in the rural areas, and 55 per cent for males and 17 per cent for females in the urban areas.
- 22. Between 1999-2000 and 2004-05, in the rural areas, work participation rate (WPR) in the *usual status* increased by about 2 percentage points for the males and by about 3 percentage points for the females. In the urban areas, the rates increased by about 3 percentage points for both the males and females.
- 23. In rural India, the proportion of 'all' male workers engaged in the agricultural activities declined gradually from 81 per cent in 1977-78 to 67 per cent in 2004-05. For 'all' female workers, the decline was less from 88 per cent in 1977-78 to 83 per cent in 2004-05.
- 24. In urban India, the 'trade, hotel and restaurant' sector engaged about 28 per cent of the male workers while 'manufacturing' and 'services' sectors accounted for nearly 24 and 21 per cent, respectively, of the usually employed males. On the other hand, for urban females, 'services' sector accounted for the highest proportion (36 per cent) of the total usually employed, followed by 'manufacturing' (28 per cent) and 'agriculture' (18 per cent).
- 1. The unemployment rate (number of person unemployed per 1000 persons in the labour force), according to *usual status* (ps+ss), was 17 in the rural areas and 45 in the urban areas. The unemployment rates for females are found to be higher than that for males, and highest among urban females.
- 26. About 1 per cent of male workers and less than 1 per cent of female workers reported change in their occupation during the two years preceding the date of survey.
- 27. During the two years preceding the date of survey, about 1 per cent of the usually (ps) employed had changed their work status while about 7 (urban males) to 9 (rural females) per cent had changed their establishments.

Women and Men in India

28. The availability of gender disaggregated data and its dissemination on various issues relating to agriculture is an essential requirement. Keeping this requirement in view and in order to address the needs of planners, policy makers, researchers and other data users, the Central Statistical organization (CSO), Ministry of Statistics and Programme Implementation, releases a publication namely 'Women and Men in India' since 1995 regularly collecting gender data on various indicators including those of Agriculture from various line ministries/institutions and publishes the data through the publication. In this publication India's position in international context in terms of UNDP Human Development Index (HDI), Gender Development Index, along with other development indicators like Infant Mortality Rate, Total Fertility Rate, Annual Population Growth, Maternal Mortality Ratio, Life Expectancy at Birth etc. are published. Besides, this publication contains information on various aspects of women in India namely rights and privileges of women in India, Population and Vital statistics, Gender wise health statistics, participation of women in the economy, their educational achievements, women's participation in decisions making, social obstacles in women's empowerment, international comparison in development indicators etc. The rural/urban breakup and state wise gender data is given wherever feasible. It is one of the important source of gender based information on issues related to Agriculture. It is an annual publication. Publication of the year 2004 is already released and that of 2005 is under print.

Women in organized sector

29. The Director General of Employment and Training (Ministry of Labour) collects and compiles the data on labour participation in organized sector (quarterly) with a break up of Private and Public organized secors. In 2002, as per the publication states that the Public Sector consists of highest number of women in community, social and personal services, whereas in private sector majority of employed women are in manufacturing industries. The total employment of women in organized sector is only 18 per cent. (Quarterly Employment Review, Ministry of Labour).

Special programmes under the Rural Development Department

30. The Ministry of Rural Development framed various programmes to bring women into mainstream and to encourage their participation in the process of national development. These programmes have special components for women and funds are earmarked as 'Women Component'. The various schemes benefiting women are the Sampoorna Gramin Rozgar Yojana (SGRY), the Swaranjayanti Gram Swarozgar ojana (SGSY), the Indira Awaas Yojana (IAY), Central Rural Sanitation Programme (CRSP), and the Accelerated Rural Water Supply Programme (ARWSP). The statistics of the Department of Rural Development gives project wise, vast information on gender based activities. If properly utilized they serve good policy instruments. The data states that in 2003-04, 446.3 million man-days were generated under SGRY(I) out of which 26.84%

were female beneficiaries, and 409.7 million man-days under SGRY (II) out of which 26.31% were female beneficiaries.

Deficiencies in the data on gender issues in agriculture

Time lag

31. Data collected from most of the Population Censuses, Agricultural Census & Livestock Censuses, Sample surveys on Labour, Health, Education Statistics suffers from time lag ranging from 3 to 5 years and they are not in some cases

Deficiency in Labour force Censuses /surveys

- Information relating to the labour force is generally available from data on the economically active population collected in population censuses and labour force surveys. These are, in fact, the most appropriate sources of information about the labour force and employment in general and the agricultural/non-agricultural differentials in labour force participation. However, as a result of measurement problems, it is clear that the extent of women's participation in agricultural work can be significantly underestimated in these sources. Furthermore, more accurate details regarding the different categories of agricultural labour, as well as the hours worked (including gender differentials), should be obtained from these sources through the appropriate re-tabulation of the results.
- 33. Labour statistics often undervalue women's contribution. The bulk of women's production takes place in the informal and non-monetary sectors. Care should thus be taken when using labour statistics to indicate the contribution and availability of male and female labour. Review of other secondary sources or a special study may be needed to obtain a clear picture on labour availability by sex and season.

Data on Women headed families

34. Data on the sex of holders are useful in determining the role of women in decision-making and the proportion of women who are heads of families. Data on holdings by the size of the holder's household, together with details of employment status, ownership of land and assets, provide a measure for household well-being. Such analysis may indicate the level of economic support provided by the head of household, as well as the management of human resources, and help to reveal the causes of gender-biased poverty in rural areas.

Same unit – holistic view

35. Reliable information on the contribution of men and women to production and consumption, as well as income generation in agriculture, cannot be obtained at one place from the existing censuses and surveys, largely because the unit of data collection for output and consumption is not an individual but holdings or households. To obtain such

information, it is necessary to use time-use surveys, allowing for double measurement strategies of production and consumption variables – in time units as well as in value units, both at the individual and household levels.

36. It is also argued that the number of female-headed households is not necessarily a good criterion for target group selection. Some types of female-headed households are likely to have less access to resources. On the other hand, they may be sole decision-makers – this gives them more flexibility in deciding on allocation and use of resources. Information on female-headed households should be interpreted in conjunction with other data such as income levels, economic activities educational standards and household decision-making.

Importance of informal economy

- 37. Subsistence production in rural and fishing areas, and related fishing services as well as domestic work, is mostly unrecognized, unorganized and unpaid and therefore often not fully valued. When measured in terms of the number of tasks performed and time spent, it is greater than men. Most of the work that women do, such as collecting fuel, fodder and water, or growing vegetables, or keeping poultry for domestic consumption, and other household and community work goes unrecorded.
- 38. From the data available, it is noticed that there are far fewer women in the paid workforce than there are men. There are more unemployed women than there are unemployed men. Also, women generally work more in the informal sector where wages are lower and they are not covered by labour laws. Within organizations, women generally hold lower-paid jobs. Women workers are also engaged in piecework and subcontracting at exploitative rates. These specific features are to be noted for policy decisions.

Appendix 5.2

Invisibility of Women's Work and Alternative Estimate

(excerpted from Maithreyi Krishnaraj and Amita Shah, Women in Agriculture, Academic Foundation, 2004).

Difficulties in measuring the nature and extent of women's participation in economic acitivties in India have been recognized and debated since the early eighties. (Sardamani (1988); Krishnaraj (1990); Visaria (1999); Sen (1983); Agarwal (1985); Anker (1983); Hirway (2001). However, as noted earlier, more than proper estimation of women's work, what is at issue is the recognition of their status as independent workers.

5. 2.1 Data Gaps and Limitations

Difficulties in enumerating women's economic activities arise because of the mis-match between the definitions as well as methodologies used and the nature of women's work (within a household setting) which is multiple as well as fluctuating. While there is no doubt that almost all women, including those classified as "not working" spend a major proportion of their time in activities that would be considered work, if they were

performed by a person unrelated to the household or by a hired helper (Visaria, 1991), their work remains `invisible' in the official statistics. This could be attributed to four major factors: (i) seasonal and intermittent nature of women's work; (ii) large proportion of work being unpaid and home based; (iii) cultural primacy to males as the main provider leading to under reporting of women's work; and (iv) limited ability of enumerator to identify work (Hirway, 2001).

The concepts used by Census and NSSO for identifying worker differ at two levels – in what they consider as work and the means they use for identification of a worker (Subramanyan, 1999). According to the Population Census, `work' is defined as any "productive activity for which remuneration is paid and is market oriented", and `worker' is a person who is engaged in `work'. If a person has worked for a major part of the year she/he is considered as main worker or else as marginal worker. By NSSO definition, a person is a worker if he/she is engaged in any "economically meaningful activity" which also include activities like looking after livestock, fodder collection, foodgrain processing etc. The census enumerator asks whether the respondent person is a `worker' or not, whereas the NSS investigator asks about the activity that the person/s are engaged in; the latter obviously will have better coverage of workers especially female worker vis-à-vis the former. This how the WPRs estimated by NSSO is much higher that by the Census (for instance the estimated WPR for rural female was 29.2 by Census-1991; whereas it was 15.4 by NSS-50th round-1993/1994).

Despite the various efforts for improving the coverage of female workers, several of the activities such as collection of fuel, fodder and water; unpaid work in home based enterprises; and agro processing work are not adequately captured even by NSS surveys. This is reflected by the fact that a large proportion of workers come under activity category 93 (i.e. attended domestic duties and also engaged in free collection of goods, sewing, tailoring, weaving etc. for household work) in the revised estimates of 38th round (Kundu and Premi, 1990). Of course, there are still problems about creating this new category of code-93 because it may "prejudice the choice of many who may otherwise, would have responded as workers" (Seal, 1980). Also, the very categorization of women's work as subsidiary or marginal reflects a mind set about women's work. (Sardamoni, 1990). Notwithstanding these biases pertaining to the overarching perspectives on women's work, attempts have been made to generate alternative estimates by using the additional information collected during the 43rd round of NSSsurvey from the persons who reported as 'engaged in household duties as Principal Usual Status (Subramanyam, 1999). Some of the major findings can be highlighted as follows: When asked whether they performed certain specific activities more or less regularly for household consumption three types of activities were identified:

- (y) those related to agricultural production (and also included as `gainful activities' by NSSO);
- (z) processing of primary products produced by households for the consumption (defined as `gainful activities' by international standards); and
- (aa) other activities for own consumption but, resulting in economic benefits to the households (not considered as `gainful activities' by both).

The analysis of the 43rd round results show that about 60 per cent women engaged in household duties (by Usual Principal and subsidiary- UPSS) were in fact engaged in one

or more of the activities under the category (a) listed above; the proportion increased to 68 and 88 when activities under (b) and (c) were included. The corresponding figures for urban women were 16, 18 and 66 per cent respectively.

Adjusting the WPRs by including the activities under (a), (b) and (c) provide substantially higher WPRs as shown in Table 7. The adjusted WPRs for rural women increased from 24.5 per cent to 39.8 per cent by including those covered in activity code – 93; and further to 45.3, 47.6 and 55.0 when activities under (a), (b) and (c) were included respectively.

It may be mentioned here that even inclusion of secondary activities does not fully capture women's work. The study by Chand and Jain (1982) indicated that about one-third of those who reported themselves as "not working" during NSS-survey, were actually found to be engaged for a few hours each day in productive activities.

The evidence of invisibility of women's work in Census estimates are obviously for more glaring than in the case of NSS survey as noted by Omvedt, G. (1992); Sudarshan (1998); Mukhopadhyaya (1982); and, Mehta (1996); Chowdhry, (1994). Time Use Surveys therefore can help bringing the data gap. We may look into the results of the pilot survey conducted in 1998-99 for the first time by the official data collection system i.e. Central Statistical Organization in India. Data were collected from a sample of 18,387 households covering six states viz; Madhya Pradesh, Gujarat, Meghalaya, Tamil Nadu, Haryana and Orissa. The survey collected data on how members of the sample household spent the last 24 hours of a normal (working) day and of the weekly variant during the last week. The activities reported by the households were classified into four categories (for details see, Hirway, 1999). They are categorised with respect to whether they are included in the System of National Accounts (SNA) and whether they are market or non market activities.

- (ii) Market-SNA activities
- (iii) Non-market SNA activities
- (iv) Non-market Non-SNA activities falling in general production boundaries (like care, shopping, house keeping)
- (v) Personal activities that cannot be delegated to others.

5.2.2 Preliminary Results

The major findings emerging from the pilot survey can be summarized as follows:

- (i) The WPR, following the NSS-definition of worker, is found to be a high as 76.3 and 62.3 per cent for male and female respectively. Apart from higher estimates, the gender gap between WPRs is found to be much smaller than that in NSS surveys.
- (ii) Considering only extended SNA activities (including house up-keeping, care and community services), the WPR for female was as high as 87.3 per cent vis-à-vis 46.9 per cent in the case of male.
- (iii) In rural areas total quantum of time spent on SNA activities (i.e. by NSS-definition) the estimates work out to be 42.4 hours (per week) in the case of male vis-à-vis 23.8 hours for female. The real difference therefore comes from women's time spent on non-SNA activities which is as high as 30.3 hours per week.
- (iv) Women spend about 2.1 hours per week on non-market SNA activities like free collection fuel, fodder, water, fish, fruits etc. vis-à-vis 0.65 hours by men.

- (v) Women spend 3.12 hours on animal husbandry as compared to 3.93 hours in the case of men; but women are engaged more in tending of animals, during making and milking whereas men spend their time on grazing and tending of animals and sale and purchase related activities.
- (vi) In terms of extended SNA activities, women spend 25.2 hours on house keeping, 5.0 hours in caring and 0.07 hours in community services.
- (vii) Finally, the time spent on unpaid SNA-work (i.e. non-market SNA activities) is 33 hours in the case of female vis-à-vis about 18 hours in the case of male

The above observations, though tentative, confirm the fact that women's work is not only under estimated it is also severely under valued. The real problem therefore is not of measuring the number of hours but, that of recognition. The family household knows the value of women's work to the household. It is public recognition that is needed so that it can be a focus for policy.

5.2.3 Problems of Valuation

"Counting" women's work is one aspect. Valuing it to demonstrate its contribution to NDP is another intractable problem. Krishnaraj (1990) evaluates different approaches adopted in valuation of women's unpaid work. Measurement of women's hours through records of time spent on different activities gives some estimate of the relative contribution of women to household labour. This is often done through deriving "average" time spent. This is not always a reliable measure. Different activities when averaged without regard to seasonality, frequency etc. may give an unrealistic picture like "4 minutes per day on building". It is important to indicate also person days spent on different activities by season, by sex, by age and class. This is done in some of the studies undertaken in South East Asia and Africa. Clear differences between land owning and landless emerge.

According to an ILO study referred to by Krishnaraj (1990) domestic activity consumes a minimum of 25% total labour inputs of the combined household labour time of men, women and children. In rural areas, free collection of goods and food processing account for 45% total household labour time. There are two basic approaches; input related and output related. In the input approach, the most typical imputation is to value the inputs of unpaid labour by some kind of wages. Unpaid labour is here perceived as a "service" and not as a "good". All wage based calculations need to know first the extent of labour-inputs. There are several possibilities using market wages, opportunity costs or average or minimum wages.

If we use market wages of a relevant category of workers, the category of workers chosen influence the outcome – for instance whether we use substitute household workers, of workers performing similar activity in market enterprises or foregone wages. There is a common criticism against using market wages. The wages used are based on current supply demand position and that if all unpaid labour moved into the market, the value will catapult downwards. However, the process where unpaid labour moves into the market or where goods produced at home begin to be commercialized is in no society an abrupt one. As between the evaluation based on wages for equivalent market function and those based on substitute household workers, the latter is better for composite activities. In industrialized economies, equivalent market function reflect a different production organization with higher capital, overheads and level of skill and therefore would tend to overstate the value. In third world economies, the nearest category of

production enterprises tend to replicate the structural features of the household mode: low capital, high labour intensity, small scale etc.

Opportunity cost of labour time spent in the household presumes a model of maximization of returns which is culture based value. There are several problems in using alternate uses of time. First, for most third world rural economies, there simply is no alternative use. The analysis of market time secondly implies, equilibrium at the margin and a good deal of household work is indivisible. Thirdly labour market rigidities make the assumption of substitutability unrealistic. Opportunity cost (or opportunities foregone) i.e. how much a women could earn had she engaged in some equivalent market activity measures actual household output against a potential market output. It does not give us the value of household output. Where employment opportunities are scarce as in poor countries, this method is unsuitable.

Often, the use of average or minimum wages are advocated. This is the method adopted by Moni Nag (Nag 1985). According to his calculation women's share in extended NDP In so far as it does not presume a maximization of utility model of the household with household work and market work being combined in fine proportions to reach an equilibrium at the margin, it has the disadvantage that at macro level it assumes that all work time whether market or non-market has the same average values. What happens at the household level? The decision to enter market based work is not cost free - There are real labour expenses involved such as transport, migration, loss of goods services produced in the home (hot, home meals). Thus paradoxically, as the imputed value of unpaid house work dips lower, the higher the expenses related to market related activity because to get the "net" value we have to deduct the real cost of entry. Further, even more paradoxically, the higher the expenses for entering market related work, the more it pays the household to produce goods and services at home than earn a cash income to buy those in the market. This is in fact the typical situation of a poor rural household. What we are saying is that all attempts to impute values to unpaid household production run into the same methodological impasse because such values reflect the wage structure of the labour force and therefore retain or even exaggerate the sex biases of the system. Where women's labour faces severe wage discrimination, the market wage is itself an under-valuation. Where there is discrimination against women in the labour market and segmentation by sex, opportunity costs would likewise be meaningless as a true or even approximate reflection of the worth of her household labour. In effect this means that such evaluations are sensitive to labour market conditions but are insensitive to the circumstances under which unpaid household production takes place.

The alternative approach of imputing value to output of household goods (whether gross value or value added) needs a set of market prices. Also they need cost incurred to be deducted from gross-value. This takes us back to the dissimilar structural conditions between the two modes of production. There is also a difficulty of imputing value to goods for which there are no market substitutes. Whether input related or output related, at some stage the latter has to incorporate labour-inputs. One method which is an improvement is to use consumer expenditure to arrive at net value added by household labour.

According to some studies, subsistence activities account for nearly 60% total value added in rural economies, 54-70% of household income and 30% of all domestic work.

(Goldschmidt-Claremont, 1987)

All market oriented activities presuppose the satisfaction of basic needs having been met. which means that there is an indispensable core of activities irreplaceable by anything else. This indispensability is highest in poor countries where unskilled labour supply is also highest and their wages are low. The effect of this is that the prices paid for locally produced goods and services entails low evaluation of non-market activity a paradox we pointed out earlier.

The methodology of time use studies and evaluation of unpaid work in the household began with the application of the neo classical economic theory to the household. Many refinements have been introduced in the schemata. Gronau (1977) worked out a sophisticated model capable of accounting for wife's wage rate, husband's wage rate and the presence of children as variables that determine the allocation of time as between leisure, home production and market production. By adding leisure he demonstrates the impact of changes in household work and market work on leisure. The model accepts the prevailing sexual division of labour. He rejects the argument about the cost of paid child care if the woman enters labour market by saying the family takes into their calculation when it decides on a woman takes up market work. As Krishnaraj points out 'The actual household is not a prototype of the firm or enterprise where members efficiently mobilise the time and labour of the household to maximise satisfaction. Cultural norms dictate role preferences and choice. The housewife's work or the daughter in law's work is not substitutable by market work. It is obligatory. How can one apply a model of choice to a situation of mandatory requirements?' (Krishnaraj, 1990). Closer home, Swapna Mukhopadyaya (1982) attempted a similar model using utility functions for household labour and market labour. Mukhopadyay's maximization model, is subject to all the criticism already mentioned about choice models. In addition, it is an overly simplified model that lumps all categories of unpaid labour together. The only merit of the model is that it can indicate the fixed bounds within which household labour is likely to be. (Krishnarai, 1990)

The major criticism for all similar attempts is that they use a purely economistic view of the household. As Acharya puts it (Acharya, 1983), these models in assuming a combined pool of time ignore differences as between different members. They do not answer the fundamental question: why is women's labour valued less even though it is a basic pre-condition for everyone's survival? Utilities are of different degrees. Some economists distinguish between subsistence utilities which have an irreducible biological quality and supplementary utilities which are alterable. Women's work tends to fall into the class of subsistence utilities. 'Once we accept the absolute priority of one class of utilities over another, choice on the locus of indifference curves breaks down' (Krishnaraj, 1990)

Notwithstanding the difficulties in valuation it imperative that women's economic work be seen in conjunction with the household responsibilities undertaken by them. In reality, instead of positive discrimination, the women invariably face `negative discrimination' not only in entering a paid job but, also in not being paid equal wages. We now look into the evidence on wage differentials among rural labour households. The reason we have discussed the problemof valuation is that it is critical for women farmers' status that their contribution be included officially and formally in NDP. so that the myth of men "supporting' women is laid to rest and men's dominance based on that myth be

eliminated. However faulty the methods may be, they are in no way worse than many estimates made in NDP for many sectors. Research must be mounted to reform NDP statistics in this area.

5.2.4 Summing Up

The major observations, which emerged from the analysis are:

- (xiii) The workforce participation among rural women has remained more or less stable between 32-34 per cent till mid nineties; however, in 1999-2000, it decline from 32.8 to 29.9 per cent (the corresponding figures for rural male are 55.3 and 53.1 per cent).
- (xiv) There has been only a slight decline in the share of primary sector among rural female workers from 86.1 to 85.4 per cent as compared to a sharper decline observed in the case of rural male workers from 74.0 to 71.4 per cent between 1993-94 and 1999-2000.
- (xv) The proportion of casual workers among rural female workforce is higher than that among males, but the rate of increase is slower among female workers. To a large extent, increased casualisation of workforce in rural areas is related to declining size of landholdings resulting into a larger number of semilandless and marginal holdings. But, casualisation *per se* may not be viewed as disadvantageous provided it is accompanied by higher earnings and better social space/exposure for women.
- (xvi) The average number of wage employed days have increased for both male as well as female workers; among the rural labour households; the increase is faster among female workers in most of the states. This has increased the relative share of female workforce to the total labour use on farm. The relative share however varies across crops and regions.
- (xvii) Overtime labour intensity (per unit of land) in agriculture has increased as a result of the irrigation-seed-fertiliser technology. This has happened despite mechanization and withdrawal of women from on-farm work due to increased income.
- (xviii) There seems to be an increase in the incidence of adult male moving out of family farms both in the agriculturally high growth regions as well as the lagging regions in dryland areas. Both these may have resulted in women taking up majority share of on-farm work. While there are no firm estimates on this, micro level data do indicate such phenomenon to be emerging over large number of regions. If so, women's work burden may have increased significantly the major sufferers might be those belonging to small peasant households.
- (xix) The work burden among women can be seen more clearly from the estimates of time use survey which suggested that as large as 72 per cent of the women were engaged in SNA activities (market and non-market); and 87 per cent were engaged in extended-SNA activities (i.e. housekeeping, care, community services). A significantly part of women are engaged in `unpaid' activities.

(xx) Finally, the average wage earning among male workers is higher than female workers – the ratio being somewhere around 1.4 while average real wage earnings increased since mid-seventies, there has been a slow down since midnineties; the increase is higher among female vis-à-vis male workers among the rural labour households.

While the above observations suggest moderate improvement in women's employment and wages in agriculture, the real issues pertaining to the quality of their work and their status as workers are yet to be addressed. This of course, necessitates taking the debate beyond estimation to recognition of the criticality of women's work not only in economic sphere but, in the overall context of the social order.

Appendix 6

Consolidated Reply from the UN Solution Exchange



Solution Exchange for Gender Community Solution Exchange for the Food and Nutrition Security Community Consolidated Reply

Query: Women in Agriculture-Engendering 11th Plan, from Indian Institute of Public Administration, NewDelhi(Experiences).

Compiled by Bonani Dhar and Gopi N Ghosh, Resource Persons; additional research provided by Sarika Dhawan, Research Associate and Bidisha Pillai, Senior Research Associate

17 November 2006

Original Query: Aasha Kapur Mehta, Indian Institute of Public Administration, New Delhi

Posted: 26 October 2006

Dear Friends,

The Planning Commission has constituted a Working Group on gender issues, Panchayati Raj Institutions, public-private partnership, financing of innovations and micro-finance in agriculture for the 11th Five-Year Plan. I am a member of this group and Indira Hirway is the chairperson. The larger group has been subdivided into four sub-groups, one of which is a subgroup on Gender and Agriculture.

I have been assigned the task of chairing the sub-group on Gender and Agriculture. We are required to critically review the existing approaches, strategies, policies, schemes, etc in the context of the empowerment of women in agriculture for the 11th Plan.

As is well known, women contribute extensively to agricultural production through a large number of time and labor intensive activities. Yet women lack access to and control over resources and their significant contribution to the agricultural sector remains statistically invisible. Gender discrimination is evident by the absence of women landowners, women's inability to access credit, water, technology, agriculture extension and training, and to receive equal wages for equal work.

In an effort to make the agricultural policy more gender sensitive, we would value suggestions from members on:

- Ways to improve the design of ongoing programs and schemes or to converge them, in order to empower women in agriculture
- Examples/experiences of successful gender friendly innovations, approaches and strategies by NGOs working in the agricultural sector and suggestions for their adoption by the government in the 11th Plan?
- What are the needs of women in agriculture?
- What are the three key priorities that the Planning Commission should address in the 11th Plan?

Responses received, with thanks, from:

- 1. Rasheed Sulaiman V, CRISP, Hyderabad
- 2. A. Bandyopadhyay, ICAR, New Delhi
- 3. Shashi Singh, Consortium of Women Entrepreneurs of India, New Delhi
- 4. Vikas Jha, HSBC, Mumbai
- 5. V K Madhavan, Chirag, Nainital
- 6. Debadutta K Panda, M P Associates, Bhubaneswar
- 7. K.S. Anil Kumar, Kerala State Horticulture Mission, Thiruvanathapuram
- 8. M.S.R.Murthy, Sri Venkateswara University, Tirupati
- 9. Raj Kumar, Srijan, New Delhi
- 10. K V Peter, Kerala Agriculture University, Thrissur
- 11. Rahul Banerjee, Khedut Mazdoor Chetna Sangath, Indore
- 12. Nachiket Mor, ICICI Bank, Mumbai. (Response 1, Response 2)
- 13. Soma Parthasarthy, Nirantar/ SKS, New Delhi
- 14. Chanda Gurung, EHIWN, Kalimpong

- 15. Vijay Sardana, CITA & ARPL, New Delhi
- 16. Bansi L Kaul, Society for Popularization of Science, Jammu
- 17. Manju Jha, Indian School of Livelihood Promotion, BASIX, Hyderabad
- 18. Rukmini Rao, Gramya Resource Centre for Women, Hyderabad
- 19. C Udaya Shankar, Centre for World Solidarity, Hyderabad
- 20. Neera Burra, UNDP, New Delhi
- 21. Govind Kelkar, UNIFEM, New Delhi
- 22. Indu Chandra Ram, PCMU, Development Bank of Ethiopia, Addis Ababa
- 23. Dhanashri, UNFPA, New Delhi
- 24. Om Prakash Rautaraya, Agragamee, Bhubaneshwar
- 25. Diganta Kumar Bordoloi, Raise An Individual Now Foundation, Delhi
- 26. Neelkanth, Oxfam GB, Lucknow
- 27. N. Ramchandran, PM College of Technology for Women, Thanjavur
- 28. <u>Subhadra Channa</u>, Department of Anthropology, Delhi University, New Delhi

Further contributions are welcome!

Summary of Responses
Comparative Experiences
Related Resources
Responses in Full

Summary of Responses

Women's participation in agriculture is seldom accorded the importance it deserves. Especially with their ever-growing numbers on the farm - euphemistically called 'feminization of agriculture' - the cardinal issue calls for urgent attention by the planners and policy makers alike. Therefore, the query on increasing the gender sensitivity of agricultural policies in the 11th plan was received enthusiastically by the members. They passionately dwelt on the existing problems faced by women in agriculture, their needs, and then presented ways to incorporate various suggestions into programmes and policies -often supported by experiences from various existing projects.

One of the root causes of the problem, members indicated was the absence of recognition of women as farmers. Recognizing that the majority of farmers in India are women - marginal and small - they stressed the **need to view the farm and the farmer in an integrated framework**, which may in fact drive agriculture policies and programmes. The core issue of financial independence of women is often left outside the scope of the policy debate. This basic flaw prompted members to strongly emphasize that policy and institutions thus need to squarely address the concerns of women's control over their incomes and resources.

The other issue women farmers faced, members highlighted, was **lack of access to relevant knowledge**. Technological and other livelihood supporting knowledge must be made available to women interactively after due knowledge needs assessment seeking inputs from women themselves. Women could be encouraged to take a lead in dissemination and use of knowledge without antagonizing the male dominated social set up. In this context, members also pointed out that the extension and support system for women needs to be focused through more holistic orientation. Members made a strong case for introducing women friendly technology, tools and practices - that may reduce their drudgery. Farmer education must occupy a central place - covering overall needs of the women farm communities for sustainable development.

Another critical need highlighted, was that of **ownership of land and other resources**. Members stressed the need to support UNHCR Resolution 2003/22 on women's equal ownership of, access to and control over land and equality rights to own property and adequate housing. Promoting joint ownership of land and agricultural resources, allocation of common resources to women agricultural workers, supporting the development of new institutional mechanisms for building collective assets and engendering land reforms were some of the suggestions put forth. Additionally the women must be sensitized about their status and rights as landowners to be able to effectively access the benefits of credit and agricultural subsidies.

Members put forth several ways to improve the **design of the ongoing programmes**:

- Draw lessons from the '<u>Cafeteria of Women in Agriculture</u>' report of the Ministry of Agriculture that reviewed existing schemes in details, to institutionalize gender in all policies and programmes
- Confer land entitlement rights and other socio-economic rights to women, and promote women's access, ownership and control of such assets
- Develop livelihood related interventions, up scaling off-farm and non-farm activities
- Recognize the complementarities between forests, common property resources and agricultural land while designing agriculture sector interventions
- Allocate resources to improve labour conditions and social security for formal and informal workers
- Promote common resources- wasteland, pasture, common forestry, water bodies etc.
- Provide infrastructure and access to facilities like shelter, water and toilets, garbage removal, lighting, and, especially security of women in and around their work place - whether on farm, inside processing factories or in the trade and market places
- Revive traditional agricultural practices, such as women's control on seeds and bio-diversity, as also nurturing and management of common natural resources
- Ensure adequate training and capacity building to women in modern farming practices, use of tools and technology, processing (home/cottage), and marketing

- Involve women proactively in emerging areas like medicinal and herbal plants, bee keeping and mushrooms cultivation, seed production, farm and eco-tourism etc
- Cater for proper post harvest services storage, preservation, grading, packaging and processing and ensure preferential employment of women in these sectors
- Ensure adequate marketing and forward linkages linking women to markets
- Empower women through financial provisioning such as microfinance through SHGs
- Promote 'kisan credit cards' ensuring at least 50% cards to women
- Address social issues like health, sanitation, education, access to livelihoods etc
- Develop new institutional mechanism for building and managing collective assets
- Institute National Awards to Women farmers/ labourers/ innovators etc
- Sustain the eternal bond between husband and wife to empower women.

Members also cited several **experiences of gender friendly approaches** and strategies that had been successful in addressing some of the challenges highlighted above. A project dealing with the <u>technological empowerment of women</u> had been successful due to designing the programme based on specific needs of women. A programme in <u>Orissa</u> demonstrated positive impact by engaging women in production of cash crops. The experience from <u>Madhya Pradesh</u> saw success in adopting a multipronged approach, integrating aspects of crop selection, land and water use, community owned seed banks etc. A replicable experience cited from <u>Andhra Pradesh</u>, adopted a decentralized system of food grain production, storage and distribution, placing women at the centre. A programme being implemented in <u>Multiple States</u> across India sought to empower women in agriculture by providing direct funding to women's groups and intensive capacity building among them. They also referred to success stories of <u>organizations promoting micro finance</u>. Members also gave positive experiences of benefit to women farmers in <u>Uttaranchal</u> due to direct market linkages and designing of machinery suited to women to reduce their drudgery.

Members strongly suggested the need to make agricultural policies and programmes, not just placing women at the centre but also actively engaging them at various stages of planning and implementation. Policies and investments must incorporate ways to empower her to participate effectively in the above processes that would give her control over agriculture - which is essentially her life, livelihood and critical source of income.

Comparative Experiences

National

From A. Bandyopadhyay, ICAR, New Delhi

Technological Empowerment of Women in Agriculture

A unique attempt for technological empowerment of women in agriculture initiated under the National Agricultural Technology Project of the Indian Council of Agriculture Research. The faculty in its approach conducts trainings in the villages rather than in the training centers. The result of this specific design of training programme has resulted in the increase in the receptivity of these women to technology related information. Read More

Multiple States

Revolving Funds for Women Farmers (from Neera Burra, UNDP, New Delhi)

UNDP in the states of Orissa, Andhra Pradesh and Uttar Pradesh provides revolving fund to the women's groups in form of grant to groups and loan to members. Women's farmer groups used these funds for leasing of land, land up gradation and purchase of agricultural inputs. The communities give support for seed banks, grain banks, biogas plants, solar lanterns. Such investments and capacity building, have built an enabling environment for women farmers.

Uttaranchal

From VK Madhavan, Chirag, Nainital

Kisan Credit Cards for Women Farmers

The government has commenced promoting 'kisan credit cards' pro-actively in parts of Nainital district. As per the National Agriculture Policy announced in July 2000, the Kissan credit cards provide cover incase of accidental death and permanent disability. It offers reduction in the rate of interest as per the scheme on bank loans. The scheme provides scope for women farmers to gain from the incentive offered. Read More

Women Friendly Agricultural Tools

The Lakshmi Ashram in Kasauni works on environmental and education programme in surrounding areas for disadvantaged girls and women. They have developed farm tools & machinery for reducing the burden on women. These tools target women who toil hard on the fields and are engaged in various farm activities. Cheap and light sickles developed especially for women have proved to be extremely useful. Read More

Orissa

Women Engaged in Cash Crop Cultivation (from <u>Debadutta K Panda</u>, M P Associates, Bhubaneswar)

A state level pilot project, Lokshakti is involved in Jatropha cultivation implemented by a 15-member women group in Mayurbhanj and Keonjhar district of Orissa. The women are involved in beetle leaf and paddy cultivation along with golden grass cultivation in Puri district. The women SHGs are active in vegetable cultivation also. Similar initiatives engaging women in cash cropping had positive a positive impact on their income levels. Read More

Madhya Pradesh

Integrated Farming Systems Approach by Women (from <u>Soma Parthasarthy</u>, Nirantar/ SKS, New Delhi)

Women in the SAID program in Madhya Pradesh in Chindwara and Betul districts have sought to restore the balance in their communities through a multipronged approach. They have made efforts towards improved land quality for agriculture, water availability and access through small water structure construction. They set up community owned grain and seed banks. Women manage and control the produce, and also undertake supplementary activities like Goat rearing.

Andhra Pradesh

Decentralised Food Production and Distribution (from <u>Rukmini Rao</u>, Gramya Resource Centre for Women, Hyderabad)

Deccan Development Society is implementing a food security programme with 2000 women. In this programme they grow, store and consume food locally. Due to the initiative the food security and the nutritional status of dalit women, children and men has been enhanced. Alternative methodology of low input agriculture with bio-fertilizer, including vermi-compost are practiced and women trained in adopting non-chemical practices for pest management. Read More.

Kerala

Promoting Micro – Entrepreneurship among Women (from <u>K V Peter</u>, Kerala Agriculture University, Thrissur)

The Kudumbashree model facilitates participation of poor women in the planning, implementation and monitoring of several poverty reduction programmes, which includes farming and allied activities. Encouraging interaction through women collectives one can inculcate better understanding, leading to emergence of leadership. It provides resource support and facilitates forward/backward linkages to promote micro-entrepreneurship among poor women. Read More

Related Resources

Recommended Documentation

Cafeteria for Women in Agriculture (from <u>Rasheed Sulaiman V</u>, CRISP, Hyderabad) By Rasheed Sulaiman et.all; NCAP Working Paper 4; March 2003 http://www.solutionexchange-un.net.in/food/cr/res06110601.pdf (Size 237KB)

Document reviews successful gender friendly innovations and farmwomen's access to information on agricultural technology.

National Agricultural Technology Project (from <u>A. Bandyopadhyay</u>, ICAR, New Delhi) Indian Council of Agricultural Research; Annual Report 2004 - 2005

http://www.icar.org.in/anrep/200405/index.htm

Cites information about the project funded by World Bank and implemented by ICAR, which focuses on technological empowerment of women in agriculture.

Note from India: CASHPOR Reaches 100,000 Clients (from <u>Vikas Jha</u>, HSBC, Mumbai)

By David Gibbons; Microlinks; March 2006

http://www.microlinks.org/ev02.php?ID=10408_201&ID2=DO_TOPIC

Reviews the services provided by the micro credit institution for growing number of women in the villages of poorest districts.

Press Release-Kisan Credit Scheme and Kisan Call centres (from V K Madhavan, Chirag, Nainital)

Press Information Bureau; Government of India; February 2004

http://pib.nic.in/release/release.asp?relid=991

Press release on the credit facilities such as the Kisan Credit card scheme and a unique call centre which could be extended to and would benefit women in agriculture.

Microfinance and Missing Markets (from <u>Nachiket Mor</u>, ICICI Bank, Mumbai)

By M Shahe Emran et all; July 2006

http://www.solutionexchange-un.net.in/food/cr/res06110603.pdf (Size 216 KB)

Document discusses the high rate of interest of micro-credit leading to problems for women looking forward to setting up small-scale industry, including in farming and allied sectors.

Conference on Development Effectiveness through Gender Mainstreaming (from Govind Kelkar, UNIFEM, New Delhi)

IFAD-UNIFEM Gender Mainstreaming Programme in Asia; May 2005

http://www.gendermainstreamingasia.org/rel.htm

Press release on regional conference that aimed at reducing gender inequality and rural poverty in South Asian countries.

Recommended Organizations

$\textbf{Lakshmi Ashram, Uttaranchal} \ (\textit{from} \ \underline{\textit{V K Madhavan}}, \ \textit{Chirag, Nainital})$

http://www.actionvillageindia.org.uk/AVI/VM/Lakshmi21.htm

The organisation is involved in development work for disadvantaged women and focuses on design and production of simple women friendly tools for agriculture.

From Vikas Jha, HSBC, Mumbai

Spandana, Andhra Pradesh

http://www.spandanaindia.com/

A micro finance institution which provides equal opportunities to women to access credit for enhancing the socio-economic status of poor women in rural and urban areas.

Basix, Andhra Pradesh

http://www.basixindia.com/

An institution that promotes livelihood for the rural poor women (including agriculture) through the provision of financial services and technical assistance.

Lokshakti, Orissa (from <u>Debadutta K Panda</u>, M P Associates, Bhubaneswar) http://www.sandesh.org/website_member.asp?id=3584

Voluntary organisation working with the marginalized sections of the society for increased and effective involvement of women in agriculture.

From Rukmini Rao, Gramya Resource Centre for Women, Hyderabad

Center for sustainable Agriculture, Sweden

http://www.cul.slu.se/english/index.html

A research based organisation involved in organic farming, which provides a long-term perspective of increasing the knowledge base among women farmers.

The Deccan Development Society (DDS), Andhra Pradesh

http://www.ddsindia.com/www/default.asp

Grassroots organization which follows a decentrailsed system of food grain production, storage and distribution, actively engaging women farmers and community members.

National Research Centre for women in Agriculture, Bhubaneshwar & Bhopal (From Sarika Dhawan, Research Associate) http://www.nrcwa.org/

The organization works towards programmes and policies with women perspective for gender mainstreaming in research and empowerment of women in agriculture.

Recommended Websites

Kudumbashree (from <u>K V Peter</u>, Kerala Agriculture University, Thrissur) http://www.kudumbashree.org/

A successful model for eradicating poverty and empowerment of women through formation of collectives and micro enterprise development.

Women in Agriculture (*From Sarika Dhawan*, *Research Associate*) http://www.agrisk.umn.edu/wia/Conferences/WIA2006/posters.aspx

Conference website giving international success stories, lesson learnt and strategies of successful models pertaining to agri-business.

Gender and Food Security in Agriculture (from <u>Bidisha Pillai</u>, Senior Research Associate)

http://www.fao.org/GENDER/en/agri-e.htm

This FAO website provides a range of information on women in agriculture, including statistics, programmes and documentation from around the world.

Responses in Full

Rasheed Sulaiman V, Centre for Research on Innovation and Science Policy (CRISP), Hyderabad

The following document (Cafeteria for Women in Agriculture) could be of interest to you in undertaking this assignment. This document made for the Ministry of Agriculture in 2004, has reviewed the programmes implemented for women in agriculture in the last two decades primarily to draw lessons for improving the performance of on-going programmes. Hope you would be able to draw useful lessons from it.

Download the document <u>here</u>. (Size 237KB)

A. Bandyopadhyay, ICAR, New Delhi

I think the best way to judge what is needed for women is to ask them. The task is difficult but a meticulously designed plan to survey the country is the first and foremost requirement. The matter has as many number of commonalities as there are diversities from one part of the country to the other. To the best of my understanding the situation today is that we have decided what is good for women ourselves and addressed the problems in piece meals. The most important steps are (almost all know these):

Arrangements to make technological and other livelihood supporting knowledge available interactively after finding out which knowledge is required

Arrange to make the women themselves lead in dissemination of and use of knowledge without antagonising the male dominated social set up

Arrange to make ownership of agricultural resources including land jointly available to men and women in families

Shashi Singh, Consortium Of Women Entrepreneurs Of India, New Delhi

Some suggestions of our members from the agri sector are as follows:-

- 1) Land holding rights for women in agriculture have to be safe guarded.
- 2) Adequate training in use of modern tools, equipment and technology need to be imparted.

- 3) Latest plantation methods with high yield have to be introduced.
- 4) Forward linkages have to be ensured for use of the raw produce.
- 5) Post Harvest technologies must be ensured.
- 6) Storage, Preservation, Packaging and processing provided for.
- 7) Marketing to be catered for.

These are some of our interventions which have benefited women and they have introduced alternate crops with value addition. We would also like to introduce Medicinal and Herbal plantation wherever women are interested.

Vikas Jha, HSBC, Mumbai

It is a very interesting debate about engendering agriculture. Frankly speaking I do not support the view that if you need to empower the women in agriculture, you need to go through the traditional way alone, of directly attacking the problem (such as imparting technical skills/ activities to directly involve women in agriculture). To me the approach needs to be peripheral where we change the basic context of the problem. I am saying this because somewhere we are all refering to changing the belief and value system which has been in existence for centuries. One way that i have personally seen which works is actually empowering the women financially. I feel a lot of gender empowerment for women has happened in past 1 - 2 decades has been mainly because more women became financially independent. The moment that happens, the social status within and outside the family does change at a faster pace than the traditional methods.

One way of making the rural women more independent and a decision maker has been the route of microfinance, where groups of 5 or 20 women come together and participate in financial activity like credit / savings etc along with discussion on social issues surrounding them. They use loans from the saving or through linkage with commercial banks to invest in agriculture or other activities. There are so many examples before us that conveys that this model works faster and more effectively than the other tried models. Organisations like Spandana, Basix, Cashpor etc have shown concrete results in this regards. Apart from making the women financially independent, they have now moved on to other social issues like health, education, water conservation, livelihood, agriculture etc.

As I see it, finance / money is a very important part of any change for gender inclusion/empowerment and all the other social messages would have to be intertwined with it to make a change. It can seldom be sustainable the other way round.

V K Madhavan, Chirag, Nainital

Despite the recognition of the role played by women in agriculture, few states- if any-have strategies that focus agricultural extension efforts specifically on women. Essentially, women continue to perform significant tasks without information to assist them. Further, there are studies that reveal that innovation in terms of technology tend to be focussed on tasks performed largely by men.

- 1. There needs to be a special effort to focus agricultural extension on women.
- 2. If the state is to provide incentives to support agriculture either through subsidies or grants specifically to facilitate marketing, then there needs to be focus on linking women to markets. In other words to ensure that they receive the benefits of their contribution. We encourage women to cultivate culinary herbs as a part of crop diversification. We only buy herbs cultivated by women. While the amounts may be small but the fact is that women get paid and are delighted that they are getting cash from sale of agricultural produce. Small step but significant in terms of their self-esteem.
- 3. Farm tools & machinery that can reduce the burden on women need emphasis. For example, the Lakshmi Ashram in Kausani makes cheap and light sickles and we have found that women find these extremely useful.

Lastly, the government has commenced promoting 'kisan credit cards' pro-actively at least in parts of Nainital district. A simple recommendation that at least 50% of the cards should be issued to women will go a long way in altering the mindset that a "kisan" is essentially a man.

Debadutta K Panda, M P Associates, Bhubaneswar

The role of women in agriculture is demonstrated by the women self help groups of Orissa. I have made studies as a part of UNDP, GVT,CFMR and other agencies and studied more than 2500 women Self help groups(WSHG) in Orissa and found that more than 30% of WSHGs are engaged in Agriculture and more than 60% WSHGs are engaged in agriculture and allied groups like diary, goatery, piggery, lemon grass cultivation, beetle plantations etc. and the qualitative and quantitative output were remarkable.

Another issue in women in agriculture is to bring women in the bread earner section of the society. Various development projects were taken up by NGOs in Orissa where women groups were involved in active cash cropping and the consequences were quite positive. Lokshakti, a state level NGO took a pilot project of Jatropha cultivation and the project was implemented by a 15 member women group. In Mayurbhanj and Keonjhar dist.of Orissa, women are involved in golden grass cultivation, in Puri dist. Of Orissa, women are engaged in beetle leaf cultivation, in western orissa, women are engaged in paddy cultivation. Through out Orissa, women SHGs are engaged in vegetable cultivation.

K.S. Anil Kumar, Kerala State Horticulture Mission, Thiruvanathapuram

It is high time for all of us to think about gender inequalities and revamping the importance of the most cherished group of humankind - WOMEN. In the eleventh plan of

India we are stressing the power of women to revamp the society. This could be achieved by engaging women in the much accomplished organized retailing sector, Agricultural production sector, Cluster based primary and secondary processing and marketing segments, bee keeping sector, mushroom cultivation, Agricultural products value addition, grading and packing sector, home made products, farm/ecotourism etc. Agribusiness is going to be an important activity in coming days against the present IT industry and related activities. Role of women in that is very specific and clear. Women should emerge as a power unleashed in the 11th plan and all plans in future. For that, the spokespersons for women should also change their mind set to see the reality and act rather than acting on hypothesized manner.

M.S.R.Murthy, Sri Venkateswara University, Tirupati

Since times immemorial, women are working in several agricultural operations as owner of the land, and as mangers of patriarchal agricultural property or working as a coolie. As a result, women have good knowledge of agricultural operations.

This all happened because of mutual understanding between husband and wife. Therefore, women revel in give and take mechanism. They sacrifice more to the development of families. Therefore, we have to promote and sustain the eternal bond between husband and wife to empower the women. Therefore, our duty is to identify the harassed women and counsel the in-laws and husband to give more space to women so that family prosperous through emancipation of women.

Raj Kumar, Srijan, New Delhi

In my view, conferring the land entitlements on women could be a potent step of empowering women in agriculture. We have had a positive experience when some of the Governments reduced the stamp duty [in case the property registration was in the name of women] and we saw a surge in land titles in the name of women. The issue of access to credit is tied up land title. When women also have land titles in their names we are sure to see even women being able to access credit. These steps may redeem the situation.

K V Peter, Kerala Agriculture University, Thrissur

The following figures are disheartening.

- 1. About 55% of women and children anaemic in the world is in India.
- 2. Female literacy is the lowest in Jammu and Kashmir and literacy divide between man and woman is widening.
- 3. Man farm labour is paid 50-75% more than woman farm labour.
- 4. Mechanisation in farm sector is in favour of man.
- 5. Menial jobs in farms are to be done by woman.

There are also success stories in the empowerment of women.

1. Kudumbasree model of women empowerment as done in Kerala.

- 2. The three tier system of local government in which women are given reserved posts. They are elected. There are now women mayors, presidents and councillors. The 11th Plan should give priority to:
- 1. Empowerment through education.
- 2. Financial empowerment through women co-operatives.
- 3. Institution of National Awards to Women labour/innovators etc.

Rahul Banerjee, Khedut Mazdoor Chetna Sangath, Indore

There is one very significant way in which women's control of agricultural operations has been restricted over the past decade or so. This is through the commercialization of seeds. Earlier, especially in adivasi households in western Madhya Pradesh, the selection and storage of seeds used to be a women's operation. However, with the introduction of more and more varieties of hybrid and genetically modified seeds across most agricultural crops which have to be bought from the market each year the women have lost this control of a crucial input and it is the men who control the finances of the household who now control the seeds also. Thus the revival of traditional agriculture which is a necessity for the conservation of agricultural bio-diversity is also linked to the revival of the role of women as controllers of seeds.

Nachiket Mor, ICICI Bank, Mumbai

I feel that in order to develop a scaled response that has the potential to reach out to the 100 million or so women and their families we need to take the following approach:

- 1. Develop strategies to universalize access to basic financial services from the formal sector using all the possible channels and no matter what their costs -- the focus of the effort being that all women must get access to these services within the next five years -- I believe that this is indeed possible to do using narrowly specialised institutions which are focused on the business of finance.
- 2. Parallely work on developing livelihood related interventions, up scaling of farm and non-farm activities, reducing cost of funds, increasing volume of lending, etc. once again using a network of highly specialised institutions.
- 3. As a next step work on developing complementary infrastructure -- water, health, etc.

Please find <u>enclosed a short note</u> that describes this three part approach. I worry that a more comprehensive village by village approach which does not rely either on a specialised capabilities being built in each domain or on "revealed preference" (responding to actual needs of women rather than on central planning) will not scale and may not be sustainable.

Soma Parthasarthy, Nirantar/ SKS, New Delhi

Thanks for this window to contribute to the process. It is indeed useful that Rasheed Sulaiman has made this report accessible to all of us. I draw your attention to two facts, which I think are critical in Planning for women in agriculture.

The Agriculture sector has been a forerunner in recognizing the need to mainstream women in agriculture as a means of achieving sectoral goals of productivity and growth as well as technological advancement, (much less in the interest of gender equity and equality). There is however a perceptible shift from the goals of sustainability of thousands of farmers who are the majority in our country, and have depended on small and marginal land holdings; instead we find that the growth oriented paradigm tends to privilege the asset rich and alienate the marginalized from their traditional status of farmers. My concern is that we are loosing sight of the "farmer" who is primarily the woman in our quest to enhance the produce and the output.

In my experience of having worked with groups of small farm based communities in especially in Uttaranchal, Madhya Pradesh, UP and Bihar the key issues to ensure enhancement in agriculture and development of agriculture based communities are:

- 1. To view the farm and the farmer in an integrated framework, and recognize that the majority of farmers in India are women, and are marginal and small farmers and that must be the focus of agriculture policy (the two cannot and must not be seen as separate). Hence rather than wishing away the small farmer we need to invest in processes that will empower farmers—men and women with entitlement, support infrastructure and knowledge that will allow her to make informed choices.
- 2. The current obsession with technology advancement has shifted the debate and the finances- away from the farmer and the extension institutional structure to technological advancement to enhance productivity and returns. The extension and support system needs to be strengthened and made available through more holistic outreach- more people/staff, opportunities for learning exposure, exchange, choupaals etc with women at the centre of determining agenda and norms. In Gujarat we have found for instance that the tasks of Agriculture extension and RD departments have been clubbed at the grassroots level, with the Gram Sevika performing both roles. In the process, the extension activity is very limited in its scope and outreach, and GS is unable to ensure quality extension inputs, for which there is a weak supervisory structure.
- 3. Ensuring entitlement to farming communities to land that they have traditionally been cultivating is critical for the survival of many as well as for the sustainability of agricultural practices in these regions. In Uttaranchal for instance we are finding that land distributed to Dalit communities in the past and on which they have been working for decades has been divested from them and is instead being given to contract farmers, depriving these families of their basis for livelihoods. A struggle is currently ongoing to highlight these issues before the State government in order to restore rights and ensure sustainability of life and livelihoods of thousands of families.
- 4. To ensure a balance between food security and food surplus for markets, rather than encouraging a shift to market based production of cash crops per se. Agriculture, which is the main occupation for the majority of Indians, and the majority of the poor, needs to be viewed as a farm system rather than in a monolithic and mono cultural context.

Women in the SAID program in Madhya Pradesh in Chindwara and Betul districts have sought to restore the balance in their communities through a multipronged approach of-improving land quality for agriculture; improving water access and availability through small water structure construction and water sharing arrangements; preventing cropping pattern shifts that cause disparities in demands for water and deny food security to poorer

households; starting grain and seed banks to enable the communities to manage and control their own produce and negotiate with the traders more effectively; promotion of goat rearing as a supplementary activity for poorer asset less families; restoration of common lands and community forests for community needs and establishment of norms for this. Agriculture planning therefore needs to be based on a farming system approach, which addresses and integrates all these aspects in a regionally disaggregated framework based on geo-climatic factors.

- 5. Decentralised planning with women at the centre of such planning processes has helped to restore livelihood sustainability and agricultural growth in all the experiences listed in Rasheed's report as well as many other projects around the country, while providing women with the opportunity to enhance agency to define their priorities. These processes of enabling women to participate and negotiate their priorities in planning on the one hand and to turn the process around to decentralized and responsive planning present challenges that need to be addressed if we are at all serious about the sustainability of development interventions. Too often projects start with good intention and commitment to these goals, but institutionally the mechanisms are unable to and are ill equipped to respond to diverse needs as they arise and fall into the target and delivery prototype.
- 6. The key issue then is to institutionalize gender into the programs of the department at the central state as well as district levels not only in terms of budgets, but in terms of planning monitoring and assessment frameworks, drawing upon past experiences of the department and others to do so. All too often engendering is reduced to womens participation in training programs for technology dissemination or micro credit. While these are essential elements that will empower women to engage more actively with the development processes, the key is to ensure that opportunities for their participation are institutionalised within planning, management and assessment frameworks; and that there is adequate attention given to the educational process with women in the communities to engage with the institutions in an informed and empowered way. The department has in the past instituted these efforts, but much of this experience has remained in the pilot mode, with little adoption for overall planning and sectoral frameworks.
- 7. Farmer education must not be oriented to dissemination of technologies per se, but must seek to address the needs of farm communities to information and practices that are sustainable.

I will restrain myself from further comment and would really appreciate feedback from you and other members who are vastly knowledgeable and experienced on the above. I would like to discuss the strategies for such a gendered planning framework to be instituted with anyone interested.

Chanda Gurung, Eastern Himalayan Indigenous Women's Network, Kalimpong

As I had written in my earlier response, by and large, government departments have tended to overlook the roles of women in agriculture (and natural resource management). Instead of being recognized as key agents of food security women are frequently depicted as dependents, as helpers and supplementary caretakers, and consequently as a follow up the extension agents, who are primarily male, frequently disregard them in the delivery of services.

Therefore, I think that the three key priorities that the Planning Commission should address in the 11th Plan should be:

- 1. Policies regarding gender within agriculture.
- 2. Role of professional women in implementing policy objectives for women's empowerment and gender equity. This involves skills and support to enable the professional women to more effectively assist rural women and at the same time affect transformation in their own departments/organizations/institutions towards an enabling environment.
 - 4. Organizational barriers that obstruct women from realizing positions of leadership and influence to take on the above-mentioned roles.

Vijay Sardana, CITA & ARPL, New Delhi

The note from Mr. Nachiket Mor highlights very important issues. It is important that we should look at a practical approach to move forward otherwise banking sector will not be fully exited to come forward.

We should take views of active players seriously to get the output.

Bansi L Kaul, Society for Popularization of Science, Jammu

I feel inclined to agree with what Vikas Jha says regarding empowerment of women in all spheres of all including agriculture. Financial independence is the key to empowerment of women. Once a woman gets her own income it automatically gives her strength to assert herself and think of issues like health and education of her children. Traditionally women have been playing a crucial role, even though peripherally, in agriculture. Giving them technical know-how in agriculture will enhance their role and importance in this sector. As Vikas has pointed out route of microfinance in which women form a group and take up a project is one important way of helping them to become financially independent. This method has proved successful when tried in rural and semi-urban areas.

Manju Jha, Indian School of Livelihood Promotion, BASIX, Hyderabad

I would like to share my experience on this issue. I visited a Mutually Aided Cooperative Society (MACTS) in AP. I was aware that this MACTS did not have a single woman on the board.

So, I asked the board members, *How many seats on the board are reserved for women?* 'None.' *What does your AoA say?* 'No such provision'. *OK. Out of 88, how many women members?* '2'. *In cotton production, which activities are performed by a woman?* 'Except for sowing and irrigation, all'.

So, I pointed out that since the woman was doing almost 80% of the functions of cotton production, she is the primary user of the services of the cooperative. I then discussed the cooperative principle of the primary user being the owner of the cooperative, at some length. That this principle ensured that the control of the cooperative was in the hands of the farmer. And so, if the cotton farmer was the woman, should she not be on the board? Below is their response. And, I was not surprised...

Let us take a look at a factory. There are many workers and only a few managers. The workers are doing all the work. But, it is the managers who are running the business. If those few managers did not tell the workers what to do, would the factory run? It is the same here. The two women members we have are only nominees of earlier members.'

We discussed back-and-forth on the relationship between the board of a coop and its members - issues of trusteeship, accountability, that a resolution could not be passed if the members did not give a majority vote.....After a while, I sensed resistance building up, so I gently encouraged them to bring in women as members so that these women could receive information related to cotton production directly...let these 'women workers' be trained directly rather than indirectly though the managers.....And this, received greater acceptance.

There are other stories as well. Of women included, but not really. So, we have self appointed 'sarpanch-patis' (sarpanch's husband as the sarpanch), 'sachiv-patis' (husband of the coop's secretary as the secretary)...and so on.

And in the micro finance sector (of what I have seen).....women as proxy customers....because taking a loan in the name of a woman is smoother, easier than otherwise... And that is alright, so some would say, because after all it is the entire family's welfare and empowerment which is as important...It is the livelihood of the entire family which, after all, has to be promoted!!!!! Or, as others would say, I am not much bothered about cooperative principles...it is rural entrepreneurship that was my objective...

And so she remains, a proxy beneficiary...one among the large numbers who has been 'reached', a front for equitable development...!!!

So, how do we programme our developmental efforts for women?

In my opinion, as important as it would be to strategize and develop operations policies to scale up financial products, it would be equally important not to get lost in our quest for large(r) numbers...to also, on as large a scale, simultaneously put in efforts to develop appropriate mindsets to resolve the resistance which a rural woman faces when she sets foot outside her front door...

To develop products / services / programmes especially to meet women's livelihood needs, rather than to include women as a means for extending loans...

While monitoring our repayment rates, also monitor whether our woman customer is using our products / services, and how is she benefiting.

In sum, to develop programmes especially for women rather than to include women.

Nachiket Mor, ICICI Bank, Mumbai

Response 2

Soma Parthasarthy has sent in an excellent set of comments. I am keen to understand three aspects of this whole debate:

- 1. How does one do this at a scaled level to reach the whole country? What kinds of institutional infrastructure would need to be create? What kinds of resources would be required?
- 2. Can the availability of credit, insurance and savings products facilitate this process in any way?
- 3. There is a (draft) paper by Stiglitz (<u>may be downloaded here</u>), that argues that the rates of returns on some of these activities (at the margin and for the very poor -- not for the large farmer) can be very high. Is this borne out by experience and does that allow us some degrees of freedom in designing the first two interventions?

Rukmini Rao, Gramya Resource Centre for Women, Hyderabad

I would like to draw your attention to two large-scale experiences generated in AP, which show the way forward to promote women's interests in Agriculture. The Deccan Development Society has organized women to implement a food security programme with 2000 women, whereby they grow local food, store locally and consume locally. This has created food security for dalit women and improved the nutritional status of women, children and men. Low input agriculture is practiced with use of bio-fertilizer, including vermi-compost, non chemical approach to pest management and maintaining complete control over their seeds. This approach has been recognized and up scaled to some extent in AP.

Another major programme up scaled by the Centre for Sustainable Agriculture is to reduce pesticide costs in cultivation. The methodoligies are now adopted by more than two hundred thousand farmers in AP, supported by the state government. Such an approach has given women a knowledge base and control over agriculture as also incomes.

As you are well aware one of the reasons of the farm sector crises is our accepting WTO conditionalities and we cannot engender the 11th Plan without recognizing this problem and finding solutions. Women farmers need to take control of local markets so any financial support to do this would help women survive. Also the question of equal wages needs to be addressed. If this is implemented women will gain.

The question of what constitutes productivity needs to be addressed. We are much more productive than European and American farmers if we look at the amount of energy they use to produce one unit of food, but as long as they get subsidies we appear to be backward when in fact we are more sustainable in our production systems..

The issue of women getting a fair share from agriculture needs to be discussed in the overall global and national scenario and piece meal solutions will not help. Neither will credit availability help as can be seen from continuing suicides of male and female farmers all over the country who were trapped into debt.

The 11th plan should promote large scale efforts to implement sustainable agriculture, provide market support mechanisms and find ways and means to protect the farm sector from the vagaries of the WTO and unfair trade practices.

C Udaya Shankar, Centre for World Solidarity, Hyderabad

There are many gender just Acts/ policies with out implementation and monitoring mechanisms, which should be catered for. Sufficient resources should be allocated for the following in the 11th plan.

- Equal right to property (inheritance).
- Governmet can buy land in favour of SC/ST women.
- Allocation of commons/waste lands to SHG federations on a priority basis, but not to SEZs.
- Affected families should get lands in the names of both wife and husband (joint pattas).
- Allocation of resources for extension services targeting women farmers.
- States should be directed to enact community forestry act in addition to (rights over forests).
- Ground water should be declared as community property and science based regulations for ground water extraction and water use based on the principles of equity should be promoted.
- Minimum support prices for ID crops and rain fed crops like millets and pulses and distribution of the same through PDS. That would obviate the need for any one to commit suicide. The negative impact of suicides on women is incalculable.

All these measures would be effective only if primary health care, compulsory health insurance, anti dowry and anti domestic violence acts, old age pensions etc. (i.e. social welfare measures) are strictly implemented and monitored.

Neera Burra, UNDP, New Delhi

UNDP supported several projects in partnership with the Government of India, state governments, NGOs and CBOs focussing on women in agriculture. Some of the key issues that emerged from these projects were:

- Law, policy and programme should recognize women as owners/joint owners/farmers/cultivators/tenants.
- Governmental schemes need to be devised in ways that overcome narrowly defined departmental mandates.
- Officials of governments, NGOs and other agencies connected with agricultural developmental need to be sensitized and trained on the role and place of women in agricultural development. Government programmes should create institutional frameworks for interaction with CSOs.
- Governmental programmes should be so designed so that local women's groups, NGOs have maximum autonomy of decision-making in general and over the use of resources in particular within a broad framework for women farmers. This flexibility is crucial.

- Funds need to be earmarked for capacity building of women's groups in order to ensure sustainability of interventions.
- In order to promote food security and reduce the vulnerability of local communities during periods of food scarcity, decentralized food storage and distribution needs to be encouraged.
- Strategies for enhancing agricultural productivity have to go beyond the current focus on soil and water management and support access to micro-credit as well. While designing agriculture sector interventions, there is a need to recognise the complementarity between forests, common property resources (e.g., pastures, wastelands, surface and groundwater) and agriculture.

Following are the highlights of the women and agriculture projects supported by UNDP. UNDP's package of services for the women-in-agriculture projects in Andhra Pradesh, Uttar Pradesh and Orissa. Total budget Rs. 31.5 crores for 5 years covering approximately 2206 groups, 44,000 women in 1744 villages across 28 districts.

- Direct funding to women's groups 54 per cent.
- Capacity building for women's groups, extension staff and NGOs on agriculture and related activities 19 per cent.
- Management costs which includes support to NGOs, monitoring and reporting staff at the state and district levels, evaluations, research studies, advocacy and training materials 23 per cent.
- UNDP provides revolving fund to the women's groups (up to Rs.35,000 for a group of 15) which is a grant to the group and loan to the members. Women's farmer groups used these funds for leasing of land, land up gradation, setting up of minor irrigation, purchase of agricultural inputs like seeds, fertilizers, setting up dal chakkis, oil ghanis, bidding for contracts of fruit bearing trees, hiring of expensive equipment which could not be purchased.
- In addition, support was provided for community seed banks and grain banks (@Rs.15-20,000 each per group), bio-gas plants (@Rs.50,000), solar lanterns, land upgradation costs (Rs.50,000 per village), alternative PDS (Rs.10-20,000 per village).
- Agricultural implements (approx. Rs.10,000/- per group) included items ranging from sickles, hoes to power tillers, which the women used and also rented to other farmers. For the bigger equipment such as power tillers, several groups pooled their resources together.
- The projects also invested in extensive capacity building of women farmer groups through exposure visits (intra and inter-state), village level (field demonstrations) trainings on preparation of seed/grain banks, bio-fertilisers, bio-pesticides, weeding, new planting techniques, drudgery reduction techniques, preparation and execution of proposals, and cluster level, district level and state level workshops (issued-based and technology-transfer/technical) and melas.
- The projects have invested in building an enabling environment through capacity building/sensitization of resource groups/NGOs and agricultural extension system. Funds were also made available for NGOs to administer the project.

I am taking the liberty of attaching a note that I had prepared synthesizing the experience from these projects, which is attached.

Govind Kelkar, UNIFEM, New Delhi

In May 2005, IFAD-UNIFEM-IDRC organized a Conference on Development Effectiveness through Gender Mainstreaming: Lessons from South Asia. 120 participants from civil society organizations, village leaders, Government agencies and development partners recommended the following:

Recommendations on right to land and productive assets

- The need to promote women's access, ownership and control of productive assets, property, land, and inheritance rights.
- The need to support UNHCR Resolution 2003/22 on women's equal ownership of, access to and control over land and equality rights to own property and adequate housing.
- The need to ensure that viable land is given directly to women agricultural workers rather than being sold through international agencies.
- The need to focus on tangible and intangible assets land and water resources and social capital.
- The need to support the development of new institutional mechanisms for building collective—assets such as groups coming together to lease, buy, and cultivate land.
- The need to increase women's assets through strengthening skills, knowledge, bargaining power, and access to new technologies.
- The need to ensure that land reforms are gendered.
- The need to strengthen access and benefit sharing rights of indigenous peoples, especially women, of bio-diverse resources.
- The need to allocate resources to improve labour conditions and social security for formal and informal workers.
- The need for the vast number of women who sell on the street and in retail to have access to facilities like shelter, water and toilets, garbage removal, lighting, and, most of all, security of person.
- The need to reconsider customary practices of women and ensure that institutionalization and codification are rights based and not discriminatory.

On the question of women's unmediated (not through the household or its head) control and ownership of income and resources, I would add:

A recent ILO study observes that economic security is worsened by the fact that policies and institutions do not realize that promoting women's control over their incomes and resources would help boost growth and development. This is one of the 'main forms of gender inequality across the world' (ILO, 2004: p. 86) and systematically neglected in social policy and income statistics. In Asia, 'a large proportion of women are not able to retain their earned income – over 40 per cent in Bangladesh, over 40 per cent in Gujarat and over 70 per cent in Indonesia' (ibid.). With regard to control over the way, their

income is spent, 'in China only 53 per cent of women said they alone decided. In Bangladesh and India, far fewer could make their decisions' (ILO, 2004: p.86). Furthermore, discriminatory barriers and socio-cultural rigidities remain the major reasons blocking women from obtaining effective control of property, assets and resources and restricting their mobility within workplace or employment / self-employment structures.

The question of women's land ownership remains current in most of South Asia. It is not just land ownership but also all that goes with it – access to institutional credit, training and extension facilities. Equal property rights for women are relevant for developing production. They are even relevant for matters like raising wages, since the reservation wage (i.e. the wage at which a person will enter the labor market) does go up. To an extent, some projects are enabling women to use their access to capital as a means of acquiring access to and control over land, or related productive assets. As noted above, in parts of Bangladesh, women have taken land on lease through their loans from MFIs. In other places, they have taken control over the management and income from fish ponds from their husbands with capital from MFIs and training in aquaculture. In Andhra Pradesh, India, women in groups have leased land through the money in their SHGs.

Access to capital can enable women to get control over land and related productive assets. But what is done in these projects in small numbers can be generalized by a law to end the traditional systems that deny women's rights to land. Passing such laws are only the first step. The rights will need to be established in practice. 'Without reasonable income security, people lack real freedom to make rational choices and be socially responsible. Without collective and individual voice, the vulnerable will remain that way' (ILO, 2004: p.275). In response to the global orchestration on the feminization of poverty and to meet the demands from concerned civil society and women's organizations, women could be considered as individual subjects of poverty reduction through well-designed policy measures and its implementation for unmediated resource control and the development of related capabilities.

Indu Chandra Ram, PCMU, Development Bank of Ethiopia, Addis Ababa

I would like to offer my view concerning the issue of women in agriculture as under;

- 1. We have to evolve the process of asset ownership by women. Capability to own the assets itself will give the required fillip in active participation of women in agriculture.
- 2. As the SHG movement in India is getting stronger day by day, it is imperative that in each and every capacity building exercise/process, inputs on commercial agriculture with emphasis on diversification be included in the curriculum to equip women to understand the required participation by them in making the agriculture and family occupation.

3. There is need for drudgery reduction in agriculture operations by sustained researches as most of the agriculture operations are being carried out by women. This will ensure their greater participation.

With warm regards,

Dhanashri, UNFPA, New Delhi

Recognition of the woman as a 'farmer' is extremely important. During the course of gender budgeting we realised that while there are government subsidies for farmers it is not clear as to how many reach women farmers. If the definition of a farmer is based on ownership of land then women will not technically qualify as farmers. However, in states where the stamp duty on land registration has been reduced in case the land is in the woman's name, it has been seen that a number of families have opted to register land in the woman's name. Two things that need taking care of in this regard are - one, knowledge of the woman that she is the owner of the land and access to registration papers. Secondly, in states where this initiative has been taken, to actively identify women land owners and ensure that agricultural subsidies do reach them.

Special emphasis and effort needs to be made to reach women headed households. Training of and increase in women extension workers is another area requiring attention. Overall, reduction in stamp duty as mentioned above could go a long way in improving asset ownership by women.

Om Prakash Rautaraya, Agragamee, Bhubaneshwar

There are a number of activities / works going on by the microfinance institutions, NGOs, and the Government at large for the SHGs and women. Women involvement in agriculture production in India is not new. It is an age-old tradition. But here the question is production, productivity, human efficiency/ efficient use of women manpower, and reduction of drudgery and border issues like food security for the women and more specifically nutrition security. I think there is no direct relation with these above mentioned issues and the productivity of working women in agriculture.

Diganta Kumar Bordoloi, Raise An Individual Now Foundation, Delhi

I represent a small NGO with headquarters in New Delhi and field operations in Delhi, Assam and Uttaranchal. Our main work has been so far with empowerment of women and child education. We have a lot of women groups who are into farming and true as you said that they do lack identitiy of the good work they are doing. Unlike Delhi, where the CM has given incentives for land/property owned by women a lot is yet to be desired in the rural area. Around 16% of properties in Delhi are owned by ladies and maybe being in this sector my mother is a proud holder of the property we have been living in Delhi for the past 20 odd years and we happily pay the taxes regularly. Therefore, such incentives be given rural areas has to in the well.

Mr Nachiket Mor has rightly said all the points about Micro Finance (MF) and let me tell

you straight away that it's a lot better to go with the private Financial Institutions rather than any government one's because of the related expectations/extortions. In my recent visit to Assam, a local daily carried out an article on MF, soon after Mohd. Younis received the Nobel. It said that Grameen differs with NABARD in one main reason and that is collateral. This I beleive is a matter of grave concern.

This country needs sea-change in not doing things right but also the other 2 monkeys as said Gandhiji. Maybe, we shall see that day sooner than later. Things will improve the day there is dignity for labour among the women folk. Expect a Nobel for this country then.

Neelkanth, Oxfam – GB, Lucknow

Really, gender concerns in Agriculture policy is one of the important areas we need to consider. I have few points to submit in this regard.

- 1. Indian social system and legal institution does not accept women as farmers. So property right to women, joint paata with husband in agriculture land, issue of Kishan credit card to women at household level are three major area where we need policy intervention immediately.
- 2. Protection, preservation and development of seed and bio fertiliser, bio herbicide basically came into women domain. All these activities are important for sustainable agriculture. So we need to frame a system for building women as stakeholder in agriculture production, marketing and decision making system.
- 3. Till now we have awareness campaign and advocacy in order to develop agriculture for sustainable development, but now we have to add women as women farmers also.
- 4. Fishery is one of the important areas, which is neglected in policy. Instead of "Nilami" system on pond/tank, it should be given on lease to fisher folk community only and on priority basis to women group from fisherfolk community. During drought season, dried up fishery pond should be given on short term lease (4-6 month) for vegetable and short duration crop /cultivation to fisherfolk women group.
- 5. Like agriculture crop insurance, government needs to provide insurance to fish crop cultivators, and livestock rearers also.
- 6. Now, government need to develop detail marketing support structure, for NTFP collectors group. So that their economic development would be assured through collection, collective selling and value addition. Collection of NTFP should be taken out from the authoritative zone of forest department.

N. Ramchandran, Periyar Maniammai College of Technology for Women, Thanjavur

Neelkanth's reply to Aasha is so good. It is essential at this point of time where ever men roles are there we should legally find a place for women. Especially in agriculture women participation is more than men. In terms of person, hours and labour. Fish rearing

is very much suited for ladies in management of day today activities. Aquaculture is too considered at par with agriculture in every respect. In land holding aspect in any family shall be 50:50 for men and women.

Subhadra Channa, Department of Anthropology, Delhi University, New Delhi

I fully agree with, Neelkanth Mishra that women should be given land rights and be recognized as farmers. For one, in many parts of India and indeed the world, women are the primary agricultural workers. In the hills of Uttar Pradesh for example, the entire agricultural work is done by women. So also is rice transplant, weeding and harvesting done largely by women. yet women are not recognized as farmers in their own right.

Women also have greater attachment and responsibility towards land as a subsistence base for in the last analysis it is they who are responsible for feeding their families. A woman thus understands the value of a piece of land even more than the men. It is for this reason that women have often been at the forefront of peasant resistance movements. Giving women joint rights in land will also ensure that the land does not change hands quickly or is sold leaving the family starving as may often happen when men alone are in charge. Men tend to spend a lot of money on drinking, gambling etc. while women rarely have such vices. A woman will protect the interests of the family first and may prevent sale or misuse of land.

ENDNOTES

¹ Note sent by Soma Parthasarthy, Solution Exchange

² Maithreyi Krishnaraj and Amita Shah, Women in Agriculture, Academic Foundation, 2004; Notes sent by E. Revathi, CESS, Hyderabad; V. Prameela and Nina Bijoor 2002. Improving the Lot of Women in Agriculture, Sampark, Bangalore, through Solution Exchange; note from Geetha Kutty subgroup member; Aasha Kapur Mehta et al., The Budget: A Gender and Poverty Sensitive Perspective, National Commission for Women, 2004; CP Suiava (2006), Climbing a Long Road, MSSRF, Chennai.

³ Bina Agarwal 2006. Women's economic empowerment and the Draft Approach to the 11th Plan: Comments as Member of the 11th Plan Working Group on Land Relations.

⁴ Aasha Kapur Mehta and Sourabh Ghosh, Globalisation, Loss of Livelihoods and Entry into Poverty, Alternative Economic Survey, 2004-05, Daanish Books, New Delhi, 2005.

⁵ See the Third Report of the National Commission on Farmers, Ministry of Agriculture, Government of India. 2006

⁶ Note prepared by Snehlatha Kumar, Subgroup Member on behalf of Ministry of Women and Child Development

⁷ Aasha Kapur Mehta and Sourabh Ghosh, 2005 (op.cit.).

⁸ Bina Agarwal 2006. op.cit.

⁹ Amita Shah, Promoting Agricultural Growth among Lagging Regions in India: Implications for Women's Participation and Empowerment

¹⁰ Bhupat et al 1999, Raising Agricultural Productivity in Gujarat, EPW, February 27- March 5.

¹¹ Maithreyi Krishnaraj and Alka Parikh who collected such examples

¹² Sagari R Ramdas, Gender, Livestock and Rural Livelihoods, National Seminar on Veterinary and Animal Science Education in India, COVAS, Thissur, Jan 2005

¹³ Based on a note prepared by Snehlatha Kumar, Subgroup Member

¹⁴ Sagari R Ramdas and Ashalatha, Key Gender Issues in Livestock Production: Suggestions to Incorporate into Extension Approaches in the 11th Plan

¹⁵ Vaidyanathan, The Hindu November 2006.

¹⁶ Amita Shah op cit

¹⁷ Amita Shah ibid

¹⁸ Note prepared by Prof MV Rao, Subgroup member

¹⁹ Amita Shah ibid.

²⁰ Based on a note prepared by Shri R K Khanna, Subgroup Member

²¹ Arnold et al (2004). Indicators for Nutrition Among Women and Children: Current Status and Recommendations. Economic and Political Weekly, February 14.

²² Note prepared by Snehlatha Kumar, Subgroup Member on behalf of Ministry of Women and Child Development

²³ First Report of the National Commission on Farmers, Ministry of Agriculture, Government of India, 2004.

²⁴ Based on notes prepared by Vibhuti Patel and Alka Parikh, Subgroup Members

²⁵ Maithreyi Krishnaraj, (ed.) Gender, Food Security and Rural Livelihoods, (forthcoming) and Food Security, Agrarian Crisis and Rural Livelihood, EPW, (Review of Agriculture) December, 2006.

²⁶ Based on a note prepared by Maithreyi Krishnaraj and Alka Parikh, Subgroup Members

²⁷ Based on a note prepared by Prof MV Rao, Subgroup Member ²⁸ Mencher and Sardamoni (1982 EPW cited in Mehta 2004. NCW op.cit.)

²⁹ Based on notes prepared by Niyati Gauba and by Prof MV Rao

³⁰ Bina Agarwal 2006. op.cit.

³¹ See CPRC-IIPA working papers especially Shashanka Bhide and Aasha Kapur Mehta, Correlates of Incidence and Exit from Chronic Poverty in Rural India: Evidence from Panel Data, CPRC-IIPA Working Paper 15, May, 2004.

³² See reports of National Commission on Farmers and the Recommendations of the Civil Society Think Tank led by NAWO

33 Note prepared by Prof MV Rao, Subgroup Member

³⁴ V. Prameela et al 2002, Sampark, op.cit.

V. Frameela et al 2002, Sampark, ibid.
 Note prepared by Prof MV Rao, Subgroup Member
 Note sent by Geethakutty, Subgroup Member.

 Based on a note sent by E. Revathi, CESS
 Seth and Bilgi 2002 cited in Rasheed V Sulaiman et al, 2003. Cafeteria for Women in Agriculture, NCAP Working Paper 4. Report shared through Solution Exchange

⁴⁰ Rasheed et al, ibid.

⁴¹ Note prepared by Snehlatha Kumar, Subgroup Member on behalf of Ministry of Women and Child Development

⁴² Note sent by E. Revathi, CESS

⁴³ Note prepared by Snehlatha Kumar, Subgroup Member on behalf of Ministry of Women and Child Development

⁴⁴ Note prepared by Snehlatha Kumar, Subgroup Member on behalf of Ministry of Women and Child Development

⁴⁵ Note prepared by Snehlatha Kumar, Subgroup Member on behalf of Ministry of Women and Child Development

⁴⁶ Note sent by Ms Asha Kachru

⁴⁷ Based on Reports of National Commission on Farmers, op.cit.

⁴⁸ Based on National Commission on Farmers, ibid.

⁴⁹ Note prepared by Prof MV Rao, Subgroup Member

⁵⁰ National Commission on Farmers, op.cit.

⁵¹ Note prepared by Prof MV Rao, Subgroup Member

⁵² Based on a note prepared by Vibhuti Patel, Subgroup Member

⁵³ Note prepared by Snehlatha Kumar, Subgroup Member on behalf of Ministry of Women and Child Development

⁵⁴ Note prepared by Maithreyi Krishnaraj

55 Based on a note prepared by Snehlatha Kumar, Subgroup Member

⁵⁶ Note prepared by Maithreyi Krishnarai

⁵⁷ Note prepared by Snehlatha Kumar, Subgroup Member on behalf of Ministry of Women and Child Development

⁵⁸ Sampark, Krishnaraj, Mehta, Hirway, Krishnaraj and Shah

⁵⁹ Demanded by National Commission for Women, 2004, MWCD and womens groups.

⁶⁰ This point has been discussed in TOR No. 1.

⁶¹ See Appendix 2.1 for the Note `Gender Addressal in Agriculture-Erstwhile & Ongoing Initiatives and Future Focus', by Neeraj Suneja, National Gender Resource Centre, Agriculture, 2006.

⁶² As per the approach of the National Gender Resource Center (NGRCA), Gender Mainstreaming constitutes one of the two paths; the other is the Strategy of Target Setting.

⁶³ See National Agricultural Policy, 2000

⁶⁴ For details see, Sujaya, 2006; p. 77; 80-81.

⁶⁵ For details see, Sujaya, 2006, p. 95

⁶⁶ It is in this context a recent initiative for developing a curriculum on Gender Issues in Agriculture and rural Livelihood may be of special relevance. Ibid; pp. 98-99

⁶⁷ Neeraj Suneja, 2006 op.cit.

⁶⁸ Based on Suneja, 2006 ibid.

⁶⁹ Based on the note presented by Dharmishta Chauhan, 2006; AKRPS (I).

⁷⁰ As per the observation by the Chairperson of the Planning Commission, the extension system in most cases had greatly deteriorated, it was low in quality, and had little accountability.

⁷¹ For details see, Sulaiman, R.; Jafry, T. and Ashok, M. S. (2003), 'Cafeteria for Women in Agriculture', Working Paper No.4.

⁷² In addition, the Community-based Pro-Poor Initiatives programme was launched in partnership with the Ministry of Rural Development, Government of India, with an outlay of US\$ 10 million to support local NGOs with a strong rights-based approach to development. The basic premise of these programmes was that economic growth and targeted interventions alone are not sufficient to eradicate poverty. Poor people must themselves act collectively to change the circumstances of their lives. Building leadership capacity amongst women so that they could develop the confidence to articulate their concerns and make their voices heard was a major plank for the programmes.

⁷³ For details see Neera Burra, 2004. Empowering women for household food security: UNDP's experience and some lessons learnt through Solution Exchange

⁷⁴ This is based on Bina Agarwal's definition of empowerment"...as a process that enhances the ability of disadvantaged ('powerless') individuals or groups to challenge and change (in their favour) existing power relationships that place them in subordinate, economic, social, and political positions." Agarwal, Bina (1994); p.39

⁷⁵ Maithreyi Krishnaraj (forthcoming) Food Security, Agrarian Crisis and Rural Livelihoods.

⁷⁶ Maithreyi Krishnaraj (forthcoming) ibid.

⁷⁷ Maithreyi Krishnaraj (forthcoming) ibid.

⁷⁸ Neera Burra 2004, op.cit., Solution Exchange

⁷⁹ V. Prameela et al 2002, Sampark, op.cit.

⁸⁰ V. Prameela et al 2002, Sampark

⁸¹ Soma Parthasarthy, Solution Exchange

⁸² Note sent by E. Revathi, CESS

⁸³ Note prepared at the request of Shri Khanna, Subgroup member, by Seema Kulkarni, SOPPECOM, based on the appeal letter that was drafted by the Pune support group of the movement Maharashtra Rajya Dharan va Prakalpgrast Shetkari Parishad

⁸⁴ Note prepared by Vibhuti Patel, Subgroup member

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⁸⁶ Note sent by Bandopadhyay, Solution Exchange

⁸⁷ Note sent by Govind Kelkar Solution Exchange

⁸⁸ Note sent by Madhavan, Solution Exchange