

A model to include women in developmental initiatives

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Introduction

Any discussion on women always veers around to the gender disparities prevailing in the community. This is the case with agriculture, too, where women are never recognized as a core workforce. The subject, "Women in Agriculture" has several aspects: 1. Women's contribution to the total labour in agriculture; 2. Food safety and security for all the women members 3. Women's share of agricultural profit/ loss and natural resources; 4. Women's participation in trainings and exposures organized by state universities, Krishi Vigyan Kendras (KVK), NGOs, and other development partners; 5. Women's involvement in activities allied to agriculture, such as sericulture and fisheries.

The Aga Khan Rural Support Programme (India), which has focused on identifying and reducing the challenges faced by tribal communities in south Gujarat for the last three decades, has used the crosscutting themes of gender and development as the basis for all the development initiatives under it.

The main tribes of south Gujarat are Bhil, Konkani, Kotwalia and Kunbi. Traditionally these communities are marginal farmers who depend on rain-fed agriculture and non-timber forest products for survival. Over-exploitation and outmoded agricultural practices have eroded the natural resource base of these communities and pushed them into a vicious cycle of poverty and indebtedness. Women, who play a pivotal role in

creating livelihood options and are involved in almost all agricultural activities, are in general worse off as their role is never recognized and ownership of the land lies with the men. The AKRSP(I) has tried to bring about small but qualitative changes in the lives and livelihoods of these communities through the management of natural resources. Some of the activities initiated by the AKRSP(I) were diversification of agriculture, participatory irrigation works, livestock rearing, improvement of land, and protection of forest and forest-based livelihood initiatives. Women were encouraged not only to participate in these activities, but to spearhead social change through village-level institutions. This was achieved by introducing women-specific agriculture activities, and through capacity-building of women's institutions. It is not easy to bring women out of the confines of their homes and to motivate them to take their own decisions, especially in tribal communities, but continuous dialogue, rapport building, training and extension programmes, education on financial decision-making and inclusion in developmental activities have brought about changes which are visible at the field level. Women in the AKRSP(I) working area are now managing SHGs, running micro-enterprises, agro centers, farm tool libraries, managing irrigation assets and also fighting for land rights.

This paper discusses the strategies adopted and steps taken under the inclusive model of development implemented in the Dang district of Gujarat.

Organizational Profile

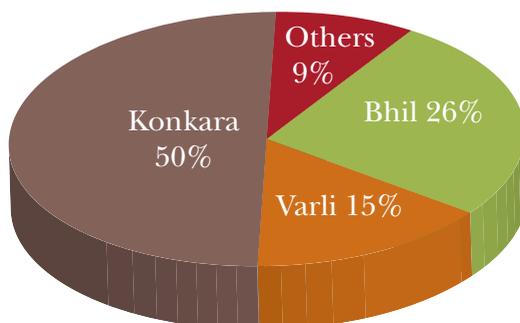
The Aga Khan Rural Support Programme (India) is a non-denominational, non-government rural development organization, established in 1984. It is active in three distinct socio-geographical areas (the coastal Junagadh district, the drought-prone Surendranagar district and the tribal, rain-fed Bharuch-Surat-Tapi-Narmada districts) of Gujarat. In the year 2004, AKRSP (I) expanded its sphere of action to Madhya Pradesh and set up an office in Khandwa and in 2008, it started working in Bihar.

AKRSP (I) believes that though NGOs cannot replace the State, they can provide models of participatory, bottom-up development and evolve approaches for replication. Its mission is *to enable the empowerment of rural communities and groups, particularly the under privileged and women, to take control over their lives and manage their environment, to create a better and equitable society*".

In July 2010, the AKRSP (I) extended its activities to the Dang through its livelihood initiatives. The main objective was to improve the quality of life of the tribals with the involvement of other development partners.

The Dang District

The Dang is a predominantly tribal district in south Gujarat. It is the smallest district in the state, with

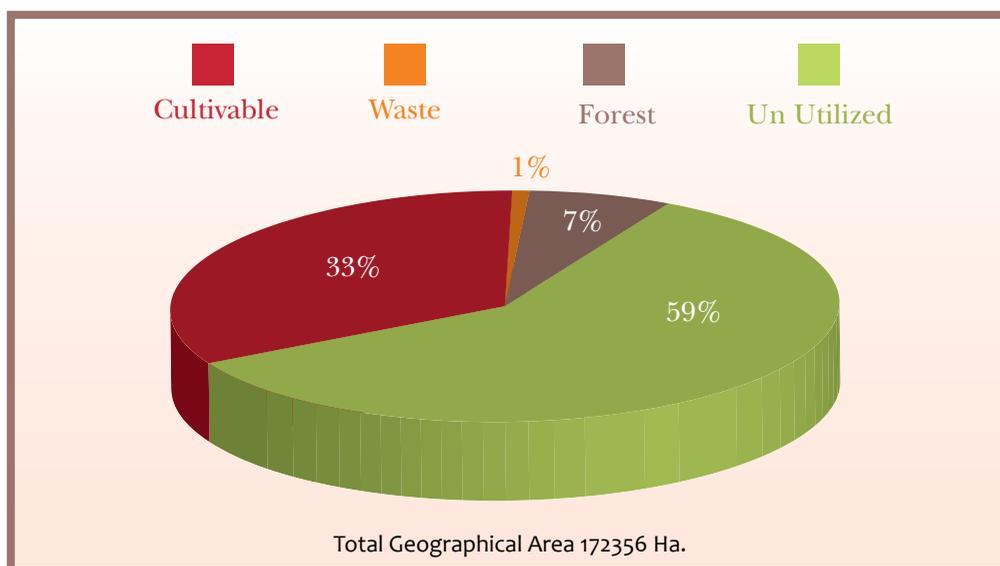


three talukas and 311 villages. The district headquarters is in Ahwa town.

As per the Census 2011, the total population of the district is 228,291, 96% of which is tribal. The major tribes are the Konkans (50%), Bhils (26%) and the Varlis (15%).

Though rich in land, water and forest resources, the district is among the poorest in the state. It is also one of the lowest ranking among the tribal regions of the country with respect to the HDI and gender-related development. It is ranked as among the most backward areas in the country in terms of the wages and output of the agricultural sector, according to a ranking of 477 districts by the Planning Commission (Source: Planning Commission, 2003).

It is noteworthy, however, that the district has a sex ratio of 1006 women for every 1000 men.



Topography

The total geographical area of the district is about 1.7 lakh hectares, out of which only 33% is under cultivation. The predominantly hilly district has a forest cover of 59% and only 1% of the area is waste land.

The average annual rainfall is 3000 mm over about 100 days, but run-off is high due to hilly topography. The low-lying areas have fertile black soil, while the rocky red soil on the slopes is prone to erosion.

Economy

Agriculture is still the main economic activity, with 90% of the population depending on it for their sustenance. For many small farmers, however, the income from agriculture does not suffice, so they are forced to migrate in search of supplementary income. A large part of the population comprises landless tribals engaged in cattle-rearing and

agricultural labour. Other than these, there are the Kotwalias, one of the most disadvantaged landless tribal communities, who make bamboo articles for a living. Firewood meets the fuel requirement of 91% of the households.

There are approximately 100 small-scale industries in the Dangs. Tourism, which is already one of the important industries can be developed further. With proper management, the forests could serve as a sustainable means of generating livelihoods. Plantations and nurseries may be developed to generate employment as may agro-processing and dairy units.

Agriculture

Paddy, *nagli*, pulses and oilseeds are the main kharif crops, while gram, black gram, groundnut, sugarcane and wheat are the main rabi crops in the area. Finger millets (*ragi*) are the

best adapted for cultivation in the Dangs as it can grow on hill slopes and in comparatively dry conditions. Mangoes and custard apples are the major fruits grown in the area, exotic fruits like strawberries have started being grown in the Shamghan area.

Intervention Approach

Agriulture is the major source of livelihood for the rural population. Hence any intervention aimed at enhancing incomes at the village level must aim at increasing agricultural productivity. AKRSP(I)'s intervention programmes on agricultural development, water resource development, and soil and water conservation are all implemented with the objective of enhancing agricultural income in a sustainable manner. The interventions are designed not only to be environmentally sustainable but also institutionally sustainable. Consequently, they are carried out through the medium of village institutions. AKRSP (I)'s experience has shown that efforts at income generation through increased productivity must be accompanied by measures to improve awareness and access. Hence AKRSP(I)'s agriculture programme consists of two parts:

1. Interventions/ technologies for enhancing incomes through agriculture

2. Extension programmes to ensure effective dissemination and adoption of the interventions

Overall AKRSP(I) approach revolves around Village institutions, where farm based and non farm based programmes are implemented and hence village institutions are cross cutting across all the programmes.

The extension of the programmes are also ensured through the Village institutions

VI- Village Institutions, APD- Agriculture Programme Development, WRD- Water resource Development, SWC- Soil and Water Conservation, FDP- Forest Development Programme

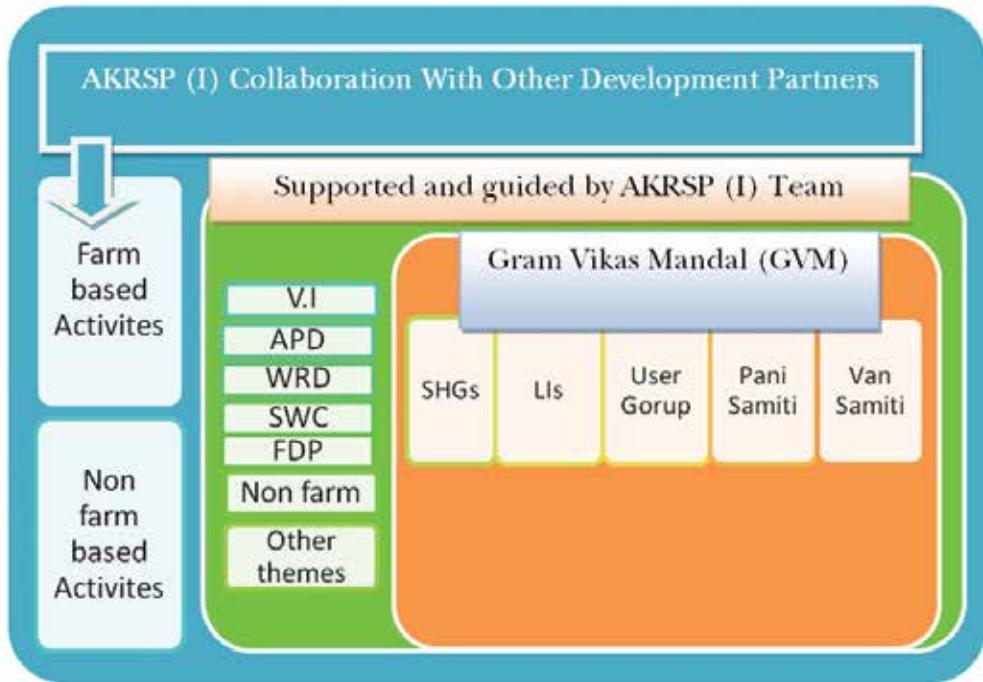
Agriculture-Related Interventions

Interventions in other areas

In Bharuch, Narmada, Surat, Tapi, and Vadodara, where the AKRSP (I) has been mobilizing tribal communities for the management of natural resources for three decades, women have been the chief focus of its activities. Altogether 11, 362 women have been involved in various activities listed in the following table. These women have formed village-level mahila vikas mandals and self-help groups. Four federations of mahila mandals, called mahila manches, have also been formed.

The following model gives an idea of our approach

AKRSP(I) Vision and Mission



Activities Involving Women

Agricultural activities	Soil and moisture conservation ctivities	Water resource development activities
Agriculture demonstration	Leveling land	Constructing check dams
Input supply	Plugging nalas	Setting up lift irrigation systems
Horticulture	Constructing gabions,	Digging and deepening wells
Organic farming	Bunds and check walls	Mobile engines
Root intensification		Working on micro irrigation schemes
Vegetable cultivation		
Vegetable kits		
Setting up vegetable nurseries		
Vermicomposting		

Women take the lead

Navagam is a village of 219 households. The majority of the population belongs to the Vasava community. The intervention in this village started in 2009 with the formation of a mahila mandal comprising of 120 members. AKRSP organized training sessions for these women to help build their capacity and boost their confidence. Initially, the mahila mandal started with demand generation for activities such as biogas, SRI and growing nurseries.

In 2012, under an employment guarantee programme of the Forest Department, the mahila mandal undertook the construction of 10 boribandhs³. On successful completion of this project they were further awarded the work of border plantation from the department, for which they earned Rs. 30,000 (approximately). Next they were entrusted with the building of a check dam along the border of three villages. With an outlay of Rs. 4,412,000, this dam has helped raise the water table in the village and directly improved the irrigation facilities of 15 persons. The women are now planning to start a fishery in this dam.

The mahila mandal has taken up watershed work for a scheme under the National Rural Employment Guarantee Act. What is more, it has become involved in the conservation of 171 hectares of forest belonging to the village. It has persuaded the forest department to ban the felling of trees and has dug a trench around forest. About 10 to 12 women take turns in guarding the forest regularly.

The growing confidence of the women has helped them take the lead in the decision-making process in the village. This has become a source of inspiration for other tribal villages in the area.

³ Temporary placement of cement bags filled with stones, mud and sand during the time of low stream flows directly on small streams and above existing check dams on the larger ones, for capturing late season flows.

In keeping with the philosophy of AKRSP (I), to begin with, staff members interact with the village leaders and women to make them aware of the organization's activities. Next, the villagers are taken to other project areas to get a feel of what AKRSP (I) does. After the initial interaction the Gram vikas mandal (GVM) is formed, which acts as a platform for learning through the sharing of ideas, the villagers elect their own leaders. It is mandatory to have an equal number of leaders from among men and women. The GVM meets once a month to discuss the activities initiated by the AKRSP (I) as well as other development issues. Under the GVM, which is a general forum, there are thematic groups like SHGs, user groups, lift irrigation society and pani samiti. The problems faced by these sub-groups and their agendas are discussed at the monthly GVM meetings. For The GVM selects extension volunteers (EV) to help the AKRSP (I) staff to implement different programmes at the village level. These volunteers get an incentive for the work they do. The AKRSP (I) facilitates the functioning of the village-level institutions in the initial phase. Later they are able to conduct the procedure themselves. Many EVs, for example, are very active and are doing wonderful work on their own initiative.

Replication in The Dangs Area

Community mobilization

When AKRSP(I) entered the Dangs in 2010, its initial task was to understand the community and build bridges. In January 2013, with support from the Axis Bank Foundation, it launched the Dangi Vikas Project with the objective of improving the livelihoods of more than 20,000 households in the Dangs and the adjacent blocks over a period of five years.

Women's Involvement in Agriculture and Allied Activities

Women are actively involved in the decision-making process of the village-level institutions. They participate in agricultural decision-making, training, field-level demonstrations, input procurement, and financial decisions. Certain activities, such as kitchen gardening and vermicomposting are designed especially for women. Some of the ways in which women are involved in different activities are as follows.



1. Input procurement

Every year the AKRSP (I) facilitates the procurement of agricultural inputs worth around Rs 3-4 million by the farmers in Dangs. Women leaders and GVM members collectively decide on the seed varieties and other inputs required through negotiated price with the vendors by. The women help in the process by taking loans from SHGs, which plan savings during the peak season. Since the women are able to arrange for the money from their SHGs, they have the right to take decisions. Women leaders of the GVM also keep track of the demand for inputs and are involved in buying these inputs.

2. Trainings and Exposures

The AKRSP (I) strategy is to take the farmers through a rigorous process of training and exposure before launching an activity. The activities launched in the Dangs are the system of rice intensification (SRI) entailing a rotation of paddy and gram and some other measures, vegetable

cultivation, landless garden, and vermicomposting. Under the SRI programme, AKRSP (I) involved around 4000 women farmers from new and old villages in village-level field days or exposure trips organized with a view to familiarizing them with the new cropping system. Women's SHGs have been formed for the dissemination of knowledge.

3. Field-level implementation

Women have been participating actively in the implementation of the SRI programme. In the peak cropping season, especially during monsoon, when rainfall is unpredictable and there is a shortage of labour, women's groups have been coordinating effectively to carry out the SRI in their land. In 2012-2013 and 2013-2014, when there was a shortfall of rain, it was the determination of the women's workforce that led to the success of the SRI programme.



Adar is a common practice in the Dangs. Under this practice, 2-3 months before the sowing of paddy and millets, farmers prepare the land by burning crop residue, wood, leaves and cow dung and mixing the ashes with the soil. They believe that this speeds up the process of germination and enhances the fertility of the soil. In reality this practice reduces soil fertility by destroying nutrients in the soil. It is also a waste of raw material that can be used as manure.

The AKRSP (I) has been dissuading the farmers from carrying on with this practice and has been promoting raised-bed nurseries instead. It conducted demonstrations and trainings for women as they form the major workforce involved in *adar*. In 2012, when this initiative began, only 68 farmers prepared raised beds. By 2014, the number of farmers practising the raised bed system increased to 800. This is one of the best examples of how women can serve as agents of change at the grassroots level.



Another initiative was to promote landless gardens⁴ among women of very poor households to ensure the nutritional security of such households. Training sessions were held for farmers' groups and for SHGs, with a special focus on women. More than 1000 women were trained in the skills of growing vegetables on homestead land. It was seen that just a small investment of around Rs 50 could fetch them visible gains.

4 In landless garden, vegetables are grown by specific method. A plastic gunny bag is filled with soil, FYM and manure in appropriate proportion. A piece of bamboo is inserted vertically in the middle of bag to make passage for watering, which is removed later on. About eight holes are made on the sides of the bag and seeds of particular vegetable are sown in the soil. When branches come outside, these are stacked with wall so that it may spread on the roof.

Support Activities

Promotion of organic agriculture

The tribals of the Dangs traditionally use crop residue and dung to make organic manure, so there is a lot of scope to develop this district as an organic district. Realizing this, the AKRSP (I) worked closely with SHGs to mobilize women for the production of vermicompost and Amrit pani⁵. Women were given support in the form of training and exposure to take up vermicomposting for their own use and for sale among farmers as a means of earning their livelihood.

5 An organic pesticide



Training In Income Generating Activities

Women are also being trained in other income-generating activities, such as mushroom cultivation and bee-keeping. The SHGs are directly involved in these activities. Landless women and widows of select tribal communities like the Kothwalia are being encouraged to take up goat-rearing. The AKRSP(I) provides each woman with five goats and helps with insurance.

Improved Housing

About 90% of the houses in this district are made of wood and bamboo, cemented by slurry of dung and mud. Earthen tiles are used for roofing and there is hardly any provision for ventilation or the passage of sunlight. Women and small children suffer the most as they spend the longest hours in these dingy, airless houses. In an effort to improve their living conditions, acrylic sheets have been used as improvised skylights to allow the passage of sunlight.

Dissemination of Knowledge

The AKRSP (I) encourages its beneficiaries to share their experiences with others during events organized under Mission Mangalam, a government initiative to promote SHGs, and those organized by other development partners.

Initially, the AKRSP staff was actively involved in disseminating information at such events, but now the women feel confident enough to share their experiences at such forums. They have also helped in the development of communication material, such as a documentary on SRI developed by the AKRSP (I).



Improvement of land and conservation of water

Though the district receives a lot of rain during the monsoon, there is heavy run-off due to the hilly terrain, and deforestation has added to the problem. The result is an acute scarcity of water during the *rabi* and summer seasons and the gradual erosion of soil. The AKRSP (I) is promoting watershed management to conserve both soil and water. The selection of the villages for such projects, as well as the planning, organization of physical labour and the payment of wages are handled by the GVM leaders. A number of women have been participating in these projects as members of GVMs as well as workers.

Another initiative to facilitate irrigation has been to provide mobile pumps to SHG members who are interested and eligible for forming user groups. The management of these pumps is in the hands of the SHG members under the guidance of the AKRSP (I) staff.

Conservation of Forest

AKRSP (I) has had a very rewarding experience in its efforts to promote Joint Forest Management (JFM) in the Netrang located in tribal South Gujarat region, where people have been involved in the protection of thousands of hectares of dense forest. The Dangs area already had *Van Samitis*, at the village level, formed by the Forest Department. However, these people's institutions



were not active. The AKRSP (I) took the initiative to revive these *Samitis* and get women to participate in JFM. As a result, women are now taking a keen interest in for the conservation of forest.

Emergence of Village-Level Leadership and Resource Persons

One of the most important indicators of development is the emergence of local leaders who take their own initiative to resolve local problems. The efforts made by the AKRSP (I) to nurture village-level leaders and resource persons in the Dangs have begun to bear fruit. The EVs and GVM leaders are capable of implementing programmes at the field level under the supervision of the AKRSP (I) staff. Women leaders groomed in the SHGs and GVMs have become vocal about

the village-level problems and are implementing programmes on their own. They have become assertive about their rights to drinking water supply and sanitation; demanded proper accounts and social audit of government programmes; and are fighting against alcoholism.

Outcome of Interventions

Although it is too early to talk about fundamental changes, there are definite signs to show that the process of improving the status of women has begun.

Membership of women In institutions

Area of work	Total
Working villages	86
- GVMs	78
- Pani samitis	16
- Lift irrigation societies	3
- User groups	20
SHGs	440
SHG members	4,865
SHG savings	2,246,786

In a short span of time (two years) AKRSP(I) has been able to touch the lives of the people of 86 villages and formed 78 GVMs for the implementation of various development interventions. About 50% of the members of these GVMs are women. One of the activities of the GVMs in which women have been participating actively is the collective procurement of agricultural inputs. In 2014 alone, inputs worth Rs 4 million were procured, helping the villagers save a net amount of Rs 0.7 million. This is a great achievement not only in terms of monetary gain, but also because it helps the community to appreciate the value of the collective approach.

The total number of SHGs formed in 84 villages is 440 and the total savings of these SHGs is Rs 2,246,786. Sixteen groups have been formed to tackle the problem of safe drinking water and women are taking the lead in this initiative. Women's SHGs have formed 19 user groups for the acquisition and use of mobile pumps for irrigation. In sum, armed with greater financial resources, women are not only acquiring assets collectively, but also becoming a part of the decision-making process.

System of Rice Intensification

The system of rice intensification was launched in the Dangs region in 2012. Initially, it was difficult to convince the farmers to adopt this system. However, once women were involved in training and extension programmes, it gained acceptance among the community. In the first year, only 247 farmers opted for the system, but the figure increased to 743 in the following year and in 2014, the total number of farmers practicing SRI was 2620. Some of the measures taken to increase productivity and reduce the cost of production are collective procurement of seeds, replacing the adar system with the raised-bed nursery method and the introduction of Cono Weeders for weeding. As the table in the following page shows, the net result has been a 40-50% increase in production.

Comparison of yields

Cluster	Grain production/acre (quintals)		Straw production/acre (quintals)	
	Traditional	SRI	Traditional	SRI
Ahwa	30.58	48.11	60.04	93.24
Subir	24.48	36.29	34.96	47.0976
Vansada	22.57	42.56	57.09	85.26336
Waghai	20.9	30.16	0	0

Conclusion

Women must be the focus of any agricultural programme. Though they are usually not assertive and not involved in the decision-making process at the rural level, they have the capacity to bring about fundamental change at the grassroots level. To tap the resources of this silent workforce, a programme must be designed to address their needs and interests, which may be area-specific. It must

be designed to include activities that can be implemented primarily by women, for example, homestead gardening. It must also focus on raising awareness among women, building their capacity and helping them to generate sustainable livelihoods. Once women are motivated, not only does the success rate of the agricultural programme in question increase, but there are visible improvements in the living conditions of the community.

