The Role of NGOs in the Popularisation of Varieties: A Case Study from Western India

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Introduction

In this chapter we analyse the role of NGOs in the identification of cultivars for farmers and the multiplication and distribution of seeds to farmers.

The work reported here was based at the KRIBHCO Indo-British Rainfed Farming Project (KRIBP(W)), a British Overseas Development Administration (ODA) funded project operating in the districts of Banswara (Rajasthan), Panchmahals (Gujarat) and Jhabua (Madhya Pradesh) to address the needs of smallholders and tribal farmers. The project in its initial phase has identified several production constraints relating to existing farming systems. Crop husbandry is the mainstay of livelihoods and forms the core of subsistence farming systems. Drawing the lessons from the participatory appraisals conducted in various project villages it is clear that seed related technologies could improve the production levels significantly.

The project has initiated Farmer Managed Participatory Research Trials (FAMPAR), on various crops involving several hundred farmers and found that some modern varieties, if appropriate to the local environments, are accepted not only by the farmers who have tried these varieties but also by farmers who have seen these MVs growing in or around their villages.

In many cases, the project has learned that the varieties which have been accepted by farmers are not the ones which have been formally released, notified and recommended by state agricultural universities and state department of agriculture of the three states under study (see section 2, and Annex 5). Some of the most popular introduced varieties (such as Kalinga III) were released in distant states, and, under present conditions, since they are not officially recognised, their popularisation must depend on organisations other than the universities and agriculture departments within the three states in which the project operates.

Numerous NGOs work in these three states and this study was initiated to examine their potential in offering introduced varieties to the farmers with whom they are working. Contacts were made with NGOs involved in seed-related activities and their activities summarised, especially those related to the identification of appropriate cultivars using participatory techniques, and the multiplication of seed using community-based systems. The objectives of the study were to produce a list of NGOs whose activities involve demonstrating and supplying seed of recommended cultivars and to establish a network of NGOs willing to collaborate with the KRIBP project on seed technology related issues in particular, and participatory approaches to farming system development in general.

To conduct the study, two inter-related methodologies were pursued: i.e., a postal survey of NGOs; and visits to a selection of responding NGOs.

Postal Survey

The survey format had three parts: the first was a covering letter to the Chief Executive Officer; the second a survey form having two simple questions regarding the involvement of the institution in seed-related activities and its willingness to join a network sponsored by the KRIBP geared towards future collaborations and the exchange of views and material; and the third part was an appointment slip for a subsequent visit by KRIBP(W) staff to the institution.

The NGOs for postal survey were selected from a number of sources including:

- Directory of voluntary organisations published by CAPART, New Delhi.
- Monitoring reports of KRIBP(W), Dahod.
- Visitors' book of KRIBP(W), Dahod.
- Discussions with colleagues at KRIBP(W), Dahod.
- Cross reference—During discussion with different persons at the time of the visit to their respective organisations, several names of the other NGOs working in the area were gathered and contacts made following the same methodology. At times, contacts were made with such institutions without sending them the survey forms beforehand.

NGOs identified by these means were listed for the postal survey. The list was limited to those NGOs directly or indirectly involved in the supply of agricultural inputs particularly seeds, or varietal identification, popularisation, multiplication, and distribution, or research and extension activities related to agricultural crops.

The working area of KRIBP(W) is the three adjoining districts of the three adjacent states, Madhya Pradesh, Gujarat and Rajasthan and this was the principal target area for this study. In addition, postal survey formats were sent to NGOs in Maharashtra which has well-developed and organised rural development activities in the voluntary sector. Only six NGOs were approached in other states i.e., two in Karnataka, one in Tamil Nadu and three in as they had been referred to in discussions elsewhere. The postal survey formats were sent to 195 NGOs including 63 in Gujarat, 33 in Madhya Pradesh and 28 in Rajasthan.

The responses primarily comprised completed survey forms, but some respondents also sent other information, such as personal letters, literature, brochures, activity profiles, and annual reports.

Survey form response

Out of the 195 NGOs to whom the survey format was sent, 71 NGOs responded (a response rate of more than 35%). From the 71 responses, 57 NGOs were interested in networking on seed-related issues. There were 22 responses from Gujarat, 14 from Madhya Pradesh, 9 from Rajasthan, 25 from Maharashtra and one from Delhi state.

Letters appreciating such an in-depth study and emphasising the urgent need for seed related activities *via* a network were received from SEWA, Ahmedabad (Guj); Gram Bharati, Mahesena (Guj); Shree Vivekanand Research and Training Institute, Kachchh (Guj); Anand Niketan, Baroda (Guj); Abhikram, Ahmedabad (Guj); KVK, Gandhinagar (Guj); VIKSAT, Ahmedabad (Guj); UNNATI, Ahmedabad (Guj); SEWA Rural, Rural Development Society, Panchmahals (Guj); Kasturba Rural Trust, Indore (MP); and Kalpataru Sansthan, Udaipur (Raj).

Visits were made to 31 NGOs after receiving the responses, including 14 in Gujarat, 7 in Madhya Pradesh and 10 in Rajasthan. Follow up letters, information on farmer managed participatory research methodology, and newsletters were subsequently sent to the NGOs that had been visited. In many cases NGOs responded positively and have shown an interest in joining the proposed network. Subsequent exchange of information led to a substantial demand for seeds of introduced varieties from KRIBP(W) (Table 15.1 and Table 15.2).

 Table 15.1
 Quantities of seed supplied by KRIBP(W) free of charge to NGOs in kharif 1995 and 1996

Seed supplied (kg)

		aize weta		lice nga III	Black	k Gram		onpea 2 87119	Niger
Institute	1995		1995	1996	1995	1996		1996	1996
Vallabh Bhai Patel, KVK, Randheja, Gandhinagar, Guj		30		550		10		10	5
Kalapatru, Udaipur, Raj		30	5	50		10		10	5
Sajeev Seva Samati, Udaipur, Raj	10	30	10	50		10	5	10	5
Self Employed Women's Association (SEWA) Ahmedabad, Guj	10	30	10	50		10	5	10	5
Shri Rajubhai Janarania C/O Guj. Khet		30	1	50		10		10	5
Choithram Foundation Trust, Indore, MP	5	30		50		10		10	5
Pratibha Chaurey, Indore, MP	5	30		50		10		10	5
Bahai Institute, Indore, MP	3	30		50	3	10		10	5
Sampark, Jhabua, MP	3	30		50		10		10	5
Abhikram, Ahmedabad, Guj	2	30	2	50		10		10	5
Total	38	300	33	500	3	100	10	100	50

	Seed supplied (kg)						
Institute†	Туре	Maize‡	Rice‡	Black gram	Soy- bean	Pigeon- pea‡	Value (Rs)
Catholic Church, Jhabua, MP	NGO			5	200		3390
IDSS, Jhabua, MP	NGO			95			3610
VBKVK, Udaipur, Raj	NGO	410				56	8540
Pahal, Dungapur, Raj	NGO	800	4060	1000		3501	253130
Prakuti Foundation, Dahod, Guj	NGO		1400	50			13100
Sadguru, Dahod, Guj	NGO	1810	40	4		5	19312
KRIBP(E)	Project	140		44			3632
DRDA, Jhabua, MP	GO	60	60	30			2460
GAU, Dahod, Guj	SAU			20			760
DDA, Jhabua, MP	GO	8		24			1024
KVK, Jhabua, MP	GO			280			10640
SDO (Agriculture), Petlawad, MP	GO	70	50	40		60	5900
SDO (Agriculture), Meghangar, MP	GO	68	100	30			2892
SDO (Agriculture), Thandla, MP	GO	65	100	30			2450
ARS, Borwat Farm, Banswara, Raj	SAU		170				1360
Co-operative Bank, Jhabua, MP	Co-op	50					700
Individual Farmers	Private	225	55	25	327	30	11272
Total		3706	6985	1677	527	3652	356472

Table 15.2 Quantities of seed supplied by KRIBP to network NGOs in *kharif* 1996 on a cost-recovery basis.

† IDSS = Indore Diocese Social Service; DRDA = District Rural Development Agency, GAU = Gujarat Agricultural University; DDA = Deputy Director Agriculture; SDO = Sub-Divisional Officer, ARS = Agricultural Research Station.
 t Maize (Shweta), rice (Kalinga III), pigeonpea (ICPL 87119)

Results of the survey and visits

Out of 31 NGOs visited, 15 were not involved in seed technology and extension. The remaining sixteen NGOs were involved either in production, extension and distribution of crop seeds of varieties which are released and recommended in their respective area of operation by the statutory agencies, or in supplying free seeds by linking themselves with subsidised government programmes.

A number of the individual cases are presented below.

Case Study - 1

Kasturba Gandhi National Memorial Trust, Kasturbagram, Indore, MP

The Kasturba Trust was established in 1945 with the aim of mobilising people to take the initiative and utilise their own resources in the areas of women's welfare and child care. It is involved in providing training for women in various vocational skills, women's education as well as health and agricultural activities. All the main crops of Malwa and Numar region, soybean, wheat, maize, chickpea, linseed and pigeonpea, are being produced at its 150 acre seed farm. Seeds of newly-released varieties are being produced on the farm on an experimental basis with the co-ordination of ICAR, the local agriculture college, and JNKVV, Jabalpur. The seeds of many crops are also supplied to the farmers. The main crops and varieties it has been dealing with are listed in Table 15.3.

It is not involved in the identification of appropriate cultivars using participatory techniques or in seed multiplication using community-based systems.

	Crop	Varieties
Kasturba Trust	Soybean	JS 81 335, PK 472, NRC 2
	Sorghum	SPV 938
	Chickpea	IG 218, IG 226, BG 244, BG 256
	Maize	Pusa Aruna, Mahi Kanchan, African Tall
	Wheat	Sujata, Lok 1, WH 147, Mangala 1077, DL 803 3, Mixture
		IARI
Gujarat Vidyapich	Pearl millet	GHB 27, GHB 30, GHB 32, MH 179
	Guar	G 75
	Wheat	Lok 1, Lok 2, J 405, VW 89
	Pigeonpea	T 15
	Castor	GCH 4
	Sunflower	GCH 2
	Cotton	НҮ-6
	Mustard	Varuna (T 59)
	Cowpea	Pusa falguni
AKRSP	Groundnut	JL-24, G-2
	Rice	GR-3, GR-5
	Cotton	S-6, S-8, HY-6, HY-8
	Pigeonpea	BDN-2
	Wheat	Lok-1, J-243397 (Lok Manya)
	Cumin	Guj-1
	Pearl millet	BK-560
	Sorghum	CSH-5

 Table 15.3
 The main crops and varieties grown on an experimental basis by three NGOs.

Case Study - 2

International Rural Educational & Cultural Association (INRECA), Dediapada, Gujarat

INRECA was established in 1984. It has implemented 15 rural development projects, mostly comprising socio-economic, environmental, child development, educational and cultural activities through various departments of state and central government. Funds are also received from international funding agencies, in addition to donations from individual well wishers.

The major crops grown in the area are cotton, pigeonpea, maize, sorghum, rice, wheat, groundnut, black gram, chickpea, finger millet and fox-tail millet. INRECA has been providing seeds to farmers at subsidised prices through linkages with various government schemes. Following discussions of the FAMPAR varietal identification process, its founder and patron Mr Vinod Kumar M Koushik was concerned that government subsidies on seed supply to farmers would probably not be available for varieties which are not officially released, notified and recommended by the SAUs and departments of agriculture. As a consequence, he did not request seed from the project. This illustrates the problem, discussed extensively in earlier chapters, associated with a regulatory framework that promotes only a few recommended varieties that are eligible for subsidy.

Case Study - 3

Sardar Vallabh Bhai Patel KVK, Randheja, Gujarat

The Gujarat Vidyapith (established by Mahatma Gandhi in 1920) has been running the Sardar Vallabh Bhai Patel KVK at Randheja village since 1978 as part of its rural service programme. The KVK, Randheja is financially supported by ICAR, New Delhi. The KVK has been running field

demonstrations on innovative and recommended technologies as well as supporting schemes for the transfer of technology under the Lab to Land Programme.

The main crops grown in the area are pearl millet, cotton, green gram, castor, rice, pigeonpea, wheat and mustard. The KVK has a farm of 65 acres, on which 25 acres of irrigated land are being used for the production of the seeds of various improved and recommended varieties, e.g., wheat, rice and mustard.

The main crops and varieties it has been dealing with are shown in Table 15.3.

Discussions with Mr Ashok A. Patel, Director, revealed that the various activities and programmes run by KVK, Randheja are in accordance to the guidelines received from ICAR. The KVK now needs more freedom to work for needs-based, situation-based research and extension on various farming system based activities. The same concern was voiced by the officials working at the KVK. The KVK requested and received seeds from the project (Table 4.1)

Case Study - 4

Janpath, Ahmedabad, Gujarat

Janpath was registered in 1989 in response to the need felt by many NGOs in Gujarat for more cohesion in NGOs' work with the State. Janpath is a loose federation of NGOs and activists, professionals and individuals sensitive to the problems of poor and marginalised people. It provides a platform for the expression of common concerns while maintaining the unique identity of each of its members group. It is a non-profit making, social and charitable organisation that promotes networking among voluntary groups in the state. Its initial objective was to share information related to various aspects of voluntary action, especially regarding new policies, acts, laws, programmes, and government schemes. It aims to enable the group to arrive at consensus and take common action in support of the poor and the oppressed.

During the discussion with the Janpath functionaries it was evident that they were not very interested in any of the seed related activities but they appreciated the idea of having a more responsive system in favour of small and marginal farmers. The issue of networking with like-minded organisations was well received by them.

Case Study - 5

Lupin Human Welfare and Research Foundation (LHWRF), Bharatpur, Rajasthan

The Lupin Human Rural support programme LRSP, now known as Lupin Human Welfare and Research foundation (LHWRF) was launched on 2nd of October 1988 (on the anniversary of Mahatma Gandhi's birthday) with the aim of evolving a model of holistic rural development by alleviation of poverty and empowerment of people. It was founded by a business house Lupin Group. It has now spread to 130 villages in Bharatpur and Alwar districts of Rajasthan state and it has been running programmes mainly in the three areas of income generation, education, health and community welfare. In the field of agriculture, an intensive programme of educating farmers in scientific methods of agriculture and forestry was undertaken. These programmes includes recommending a package of practice to farmers based on multi-input approaches such as improved seeds and their distribution, the use of fertilisers and the adoption of plant protection measures involving the application of pesticides. Work, so far, has focused on released cultivars. The possibilities of identifying cultivars by using participatory techniques in the community-based seed multiplication system have not yet been explored, and so far no requests for seed have been received. This is an example of an NGO that is concerned with providing seed to farmers, but has decided to follow the more conventional approach followed by GOs.

Case Study - 6

N. M. Sadguru Water and Development Foundation, Dahod, Gujarat

Information about the institute and its various activities was gathered through individual discussion with other colleagues at KRIBP, Dahod, from the annual report for the year ending 31 March 1995 and from an informal personal visit to its head office based at Dahod.

Sadguru started its activities in 1975 and now is running programmes in three tribal districts of three adjoining states namely Panchmahals of Gujarat, Jhabua of MP and Banswara of Rajasthan. Its activities are centred on land and water resources development by implementing various activities such as lift irrigation schemes, water harvesting structures such as check dams, well deepening - recharging, portable pumps and a watershed development programme which includes conservation of soil and water using various physical and vegetative means.

Sadguru is involved in seeds only to the extent that it links government seeds distribution to farmers. However, the institute has recommended the following crops to farmers, ICCC 4 (chickpea), Lok 1 (wheat, maize), BDN-2 (pigeonpea), Varuna mustard and a local variety of rice. In 1996 Sadguru requested appreciable quantities of seed from KRIBP, particularly for Shweta maize (Table 15.2).

Case Study - 7

Aga Khan Rural Support Programme India (AKRSP(I))

Information was gathered about the organisation through a literature search and by referring to the Annual Progress Report for the year 1989-90 and 1993. Informal discussions with some KRIBP, Dahod, staff who had previously worked with AKRSP also gave valuable insight to the work of this important NGO.

The AKRSP (I) was set up in 1983 to serve as a catalyst and stimulant for rural development in India with special emphasis on income generation and better resource management. Its registered office is in new Delhi and it has a project office in Ahmedabad. AKRSP (I) has been working in three districts of Gujarat state, namely Bharuch, Surendranagar and Junagadh. It has been involved in various programmes to support village organisations such as water resources development, wasteland development, agriculture, savings and credit, input supply scheme, animal husbandry and bio-gas production.

Its agriculture programme comprises the setting up of demonstration plots for high-yielding crop varieties with a package of agronomic practices, providing training and giving farmers access to all the necessary inputs required to adopt the new practices. The various crops and their varieties with which AKRSP (I) has worked are shown in Table 15.3.

From its report on agricultural and crop seeds related activities, it appears that AKRSP (I) has restricted itself largely to demonstration techniques and the supply of seed of recommended cultivars to the community. They have not requested seed from KRIBP.

Discussion

A close look at the case studies reveals that most NGOs, although engaged in rural development activities including on-farm and land-based enterprises, have either not yet become involved in seed-based technologies or solely depend upon the formal research and extension agencies responsible for seed-related issues. If their interest could be engaged then there is a considerable potential for initiating a more innovative approach to varietal selection and seed production in a range of crops.

One way of strengthening the NGO approach to seeds issues is through networking. KRIBP has been running a varietal identification programme using FAMPAR trials. The multiplication of seed

using community-based systems is another component of this programme. Other NGOs may benefit by incorporating lessons from the programme. In addition, seeds have already been sent to 15 NGOs as part of the effort to network seed-related activities. The quantities of improved seed were supplied to NGOs by KRIBP between *kharif* 1995 and *kharif* 1996. There was a rapid growth during 1996 (Tables 15.1 and 15.2). The value of these networking activities are discussed in more general terms in the Introduction to Part 4 (Chapter 14).