

Towards A Sustainable Future

Annual Report 2012-13



VIKSAT

Nehru Foundation for Development



Rose-ringed Parakeet



Red Wattled Lapwing



Spotted Owlet



Land Snail



Indian Starred Tortoise

Glimpses from
VIKSAT Ahmedabad Campus

Photos: Ramesh Gadhvi, VIKSAT

Towards A Sustainable Future

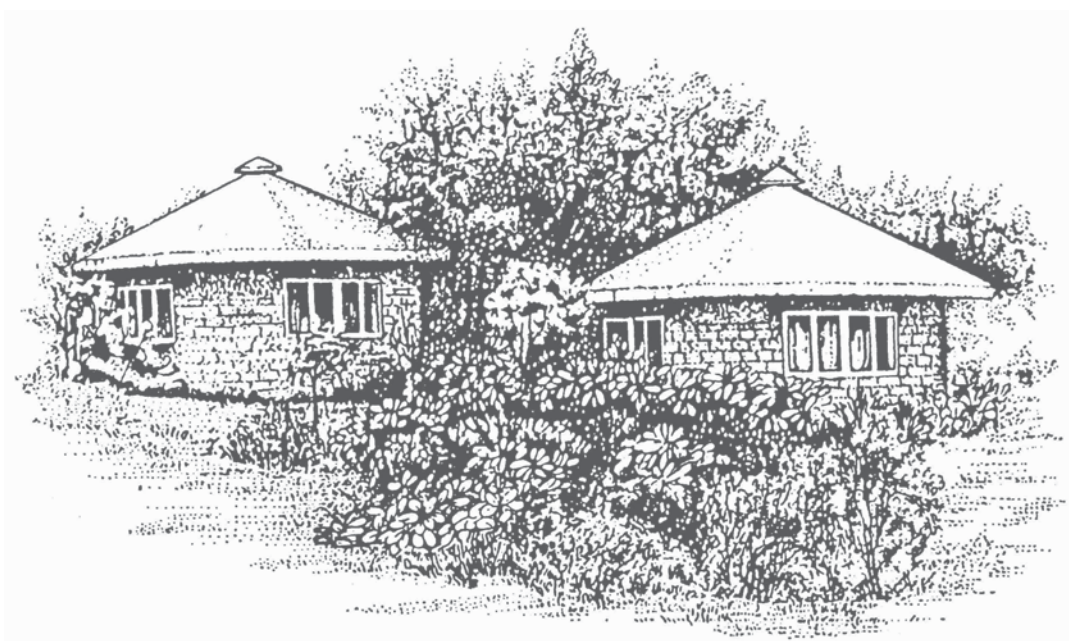
Annual Report
2012-13

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Chairperson's Message

The concept of Right to Food gained roots since the formal adoption of the UN Universal Declaration of Human Rights, in 1948. It is intricately linked with factors like elementary education, access to water, good environment, sanitation, hygiene and health care and is one of the overarching goals for development policy in the new millennium. In India, rain-fed agriculture plays the primary role in providing food and livelihoods for the growing populace. The demands for food is ever increasing but factors such as water scarcity, fragile environments, natural calamities, degradation of land due to erosion are indicative of a harsh future.

VIKSAT, an organization that initiated as a think tank soon gained a strong foothold in wasteland development and participatory forest development. Gradually, it felt the need to put concerted efforts to address the issue of food and nutrition security by promoting sustainable agriculture. VIKSAT responded to the call to reclaim the status of agriculture, to invest in the sector, to increase the effectiveness of the financial services and to support the women engaged in agriculture, the most vulnerable stakeholders of this sector.

I am happy to note that VIKSAT has responded strategically, timely and in an integrated manner, striving to address issues like poverty amongst primary producers, poor linkage with markets and financial services. Through the soil and water conservation activities under the watershed programmes, access to cheap, customized loans under the UPNRM programme, capacity building activities through farmers' field schools, crop demonstrations and increasing access to agriculture and technical inputs, VIKSAT has created an environment conducive to farming.

I congratulate the team under the strong leadership of Dilip Surkar, for organizing the producers into producer groups. This constitutes a milestone, helping the producers gain control over their produces, which in the long run will help them improve their quality of life.

I am also happy to speak about the success achieved in piloting the project of installing micro irrigation systems in the tribal belt of the state. I am also pleased to know about the Resource and Training center (AARTC), which is truly a landmark step towards capacitating the farmers to increase food productivity and enhance production by consolidating their collective strength.

I look forward to VIKSAT's efforts in the future towards strengthening and expanding agricultural education and training amongst the youth, the potential farmers of the years ahead.

The report presented herewith, summarizes the work done during 2012-13. The report will showcase the multifarious experiences gained and learning reinforced while undertaking the activities under the thematic areas. I wish all the best to the team at VIKSAT to put their best foot forward, as always, for times to come. With Best Wishes

M S Swaminathan
Chairperson
VIKSAT Council of Management



From the Director's Desk

The year took pride in seeing VIKSAT covering a few more milestones. The relentless efforts of the team members reaped results at the grassroots level and earned due recognition for the organization. Under the NEAC programme, VIKSAT along with the agency in West Bengal, was recognized as the best RRA in the country. Our colleagues in the Forestry team were requested by the MoEF, to orient the other RRAs about the campaign. This not only adds a feather to the cap, but also encourages us to stride on the path of coordination and networking. This year, over 600 implementing partners have joined hands with VIKSAT to implement the NEAC, with this year's prime theme being 'Biodiversity Conservation'.

Promoting investments in agriculture is essential to enhance growth, reduce poverty and hunger and ensure sustainable development. VIKSAT has been implementing effective financial services to promote NRM based livelihoods along with taking steps to improve soil and water quality and management. NABARD, the national development bank has rated the Umbrella Project for Natural Resources Management (UPNRM) programme run by VIKSAT as one of the best livelihood & NRM based loan programmes. By providing the rural poor, timely access to formal credit, we witnessed changes in individual lives through collective efforts. The micro level efforts have sparked the economic viability, efficiency and sustainability of the rural livelihoods.

We are also happy to start the first ever producers' company in our project area, Sustainable Rural Enterprise (SURE), aiming at bringing the producers and consumers closer to each other to facilitate direct interaction leading to mutual benefit. SURE represents 40 producer institutions, viz., farmers clubs and SHGs, with a total membership of 2000 producers.

VIKSAT was lauded for its efforts in land and water conservation in the Watershed development programme. NABARD has quoted VIKSAT as a case study in various forums. Our colleagues from the Land and Water team were invited by NABARD to conduct capacity building sessions and be a part of the project sanctioning committee.

VIKSAT is also repositioning itself as a resource center and training institution. The pool of expertise amassed over the years on varied NRM issues, strong networking with a range of NGOs, meaningful years of work at the grassroots level, strong community building processes and a commitment to initiate change and improve the environment have created the footboard for us to share, build and learn from one another.

We look forward to the relentless support received from our friends, well wishers, mentors and the state, national and international funding agencies for reinforcing our efforts with their encouragement, cooperation, guidance and consistent support.

I would like to thank the Council of Management for their guidance and trust. I also find this an opportune moment to thank all my colleagues, partners and associates for investing their time and commitment in VIKSAT and braving the odd hours to strive before we together reach the goals.

Dilip Surkar
Director, VIKSAT

VIKSAT in 37 years....

The genesis of VIKSAT can be traced to the felt need for horizontal communication involving individuals and organizations in environment promotion and protection from further degradation. VIKSAT was born to provide a platform for likeminded individuals and collectives to interact, have discourses and dialogues on issues related to environment. The primary objective of VIKSAT was thus to promote and strengthen People's Institutions (PIs) for sustainable development through natural resource management (NRM). Having started its journey as a platform to bring together the people and institutions from diverse background, VIKSAT has evolved and charted out thrust areas of intervention. Over the years, VIKSAT has carved its own niche in forestry and water sectors through innovations in water harvesting and bio diversity conservation, joint forest management and community development.

Mission

VIKSAT aims at proactively promoting and strengthening Peoples' Institutions through interaction between Government and Non-Government Organisation and people by means of active participation of men and women from all sections of the community for equitable, gender, sensitive, sustainable development and management of natural resources.

Strategy and thematic intervention

VIKSAT addresses the issues pertaining to Natural Resource Management by promoting and strengthening participatory resource management

systems. Local communities and concerned government agencies form the important stakeholders in the programmes. VIKSAT has four major thrust areas, namely, Forestry and Environment, Land and Water, Sustainable Livelihoods and Institution and Capacity Building.

VIKSAT has actively worked with the Forest Department for promotion of Wasteland development and Joint Forest Management (JFM) programme in the state of Gujarat. The efforts included both, protection of forests and affirmation of economic activities from them and have helped in changing the face of forest areas in more than hundred villages in Bhiloda and Satlasana taluka. Appreciating and empathizing the symbiotic relationship of people with forests, VIKSAT has groomed forest based People's Institution for sustainable livelihood through forest management. In the post JFM period, the importance of community participation and the rights of the communities over forests has been realized by the Government. The enactment of the Scheduled Tribes and Other Traditional Forest Dwellers (Recognition of Forest Rights) Act, 2006, has been a step towards recognize the communities' rights. VIKSAT has been building capacities of the communities about the provision of the Act.

Working towards securing food and nutrition security, VIKSAT has been making efforts for land and water management for sustainable productivity enhancement and drinking water security by, with and for the community. VIKSAT has worked at grassroots level with communities in their local



regions towards developing models which ensure sustainability of livelihoods through natural resource management. VIKSAT had mobilized financial resources to fund the community initiated entrepreneurial actions. Currently, VIKSAT facilitates creation of a favorable economic environment by increasing access to customized, easy and cheaper loans to the community. The core strategy in the sustainable development and management of natural resources is People's participation that cuts across all the thematic areas of interventions. Due to the persistent efforts, nurturing and capacity building of the peoples' institutions, they are capable of functioning independently with minimum external support.

VIKSAT as a Resource Center

VIKSAT has positioned itself as a resource center in participatory natural resource management. Capacity building of NGOs, Government agencies, communities on technical, social and institutional aspects of NRM is becoming the forte. VIKSAT also engages in disseminating information through publications, newsletters and by participating in public forums. The organization provides a learning platform for other agencies, including educational institutions, facilitating sharing of experiences and best practices.

VIKSAT at the grassroots

VIKSAT believes as organizing people and building their capacities to take ownership and address the issues related to NRM. It equips people with information, making them aware of their role as a responsible stakeholder.

A snap shot

During the late eighties, VIKSAT was recognized as the nodal agency for the National Environment Awareness Campaign by the MoEF. The educational material on drought and land degradation received high acclaim. VIKSAT also gained grounds in research, conducting seminars and workshops on various themes of forestry programme.

During early nineties, VIKSAT has set the benchmark for institution building and community mobilization. The Tree Growers Cooperative Societies developed in Kubada village became a model for development practitioners. The Joint Forest Management programme of the GOI

acted as a pressure on VIKSAT to reposition itself as an agency providing professional support to the Government of Gujarat. VIKSAT started developing training modules for NGOs and forest department. It was also gaining prominence for its community building work towards promotion and protection of the forests. The pioneering work of institution building continued during the response of the organization to address natural calamities like drought and earthquake. Capacity building of the P.Is for efficient and sustainable management of groundwater, physical interventions for soil treatment, land management and water conservation were initiated by developing rapport with the local communities. By the turn of the millennium, on one hand, VIKSAT was developing acumen in planning and installing Rain Water harvesting systems in urban locates, while on the other, the need to address issues related to sustaining NRM based livelihoods was increasingly gaining grounds. VIKSAT had already organized women into SHGs and operating revolving funds and financing micro enterprises in the villages. By the end of the first decade of the new millennium, VIKSAT had started a more structured system of facilitating access to livelihood based finance through peoples' institutions like SHGs and Farmers' clubs (F.Cs).

With the ever increasing challenges faced in sustaining the natural resources and the livelihoods, VIKSAT is constantly in the process of change, adapting the strategies and interventions to help the communities help themselves in the best possible manner.



National Environment Awareness Campaign (NEAC)

Since last 27 years, the National Environment Awareness Campaign (NEAC) is being sponsored by Ministry of Environment & Forests, New Delhi. The National Theme for the year 2012-13 was "Biodiversity Conservation" including sub themes such as conservation of critical, endangered and endemic species and fragile habitats, about land degradation and biodiversity, renewable energy, agro forestry, conservation of indigenous breed, biodiversity and sustainable practices, sustainable tourism and so on. Several Non - Governmental organizations, School, Colleges, Nature Clubs and training institutions participated in the campaign to spread awareness by using a variety of audio visual aids.



In Gujarat, out of the 811 proposals received from different organizations, 645 were sanctioned by the MoEF. The total grant disbursed to Gujarat, Diu and Daman amounted to Rs. 65, 69, 000. To provide orientation about the theme and ensure uniformity in the messages two state level orientation workshops were organized in January 17 and 18, 2013 in collaboration with Gujarat State Biodiversity Board, Gandhinagar, wherein, there was representation from 650 participants from different organizations.

National Agriculture Innovation Programme (NAIP)

NAIP aims to facilitate an accelerated and sustainable transformation of Indian agriculture to support poverty alleviation and income generation. Collaborative development and application of

agricultural innovations by the public organizations in the partnership with the farmers group, the private sector and other stakeholders has remained the prime strategy of the programme.

In collaboration with the World Bank and Government of India, Indian council of Agriculture Research (ICAR) supported two projects a)



Integrated Project for Research on Development Process and Sustainability of Livelihood in selected disadvantage district of Gujarat State b) Business value chain in seed spice under the component III & II. Both the projects are implemented with the collaborative efforts of VIKSAT & Sardarkrushinagar Dantiwada Agriculture University (SDAU).

NAIP Component - II

The objective of the component II is Production to Consumption System (PCS) ("a value chain" system in popular parlance) that involves the entire set of actors, materials, activities, technologies, services, and institutions involved from the stage of supply of inputs to harvesting of a particular commodity and transforming it into a usable product, and storing / marketing the final product. It also aims at quality maintenance and confirmation to the standards with respect to ASTA, ESA, and ISO. VIKSAT in collaboration with SDAU will carry the activities like seed multiplication and distribution for large scale cultivation, extension activities such as farmer's workshop, trainings, demonstrations on farmer's field and formation of SHG's in Gonchad village of Sami taluka in Patan district for Cumin crop and Piludra village in Mehsana district for fennel crop.

In 2012-13, the activities undertaken are as follows:
Seed Village Concept: Around 74 farmers of Shri Mahashakti Farmer Club planted Cumin GC-4 in Gochnad village in 116.95 ha. yielding 58385 kgs. The outcome was that other than the seeds being locally available (and not restricted to the Beej Nigam), there was an increase in profits by 20% profit.



Extension Activities

VIKSAT carried out capacity building activities in association with Centre for Research on Seed Spices, Jagudan. Village level monthly meetings were held wherein members from 25 farmers Clubs and 30 SHGs had participated. In these meetings, issues related to seed production, marketing of cumin seed etc. were taken up for discussion. Information about newly introduced varieties, agronomical practices, pests and disease control, post harvest technologies related to Fennel and Cumin crop etc. were imparted. Various brochures such as value addition in seed spices crop, cleaning, grading and packaging through value addition, micro irrigation system, organic farming, advanced agricultural technology of Cumin and Fennel were distributed during the meeting. Developing linkages and collaboration was also an outcome of the activities undertaken, as reflected in the table below:

Linkages and Collaborations

| Sr. No. | Linkages developed | Total Farmer's Covered |
|---------|--|--|
| 1 | Seed Certification Agency, Ahmedabad. | Registration of Seed certification for cumin seed production |
| 2 | National Bank for Agricultural and Rural Dev. (NABARD) | Registration of Farmer clubs |
| 3 | Agricultural Technology Management Association (ATMA), Patan | Involved farmer clubs in Farmers Meeting and Sibir organized by ATMA for Spices crop |
| 4 | Agricultural Department of state govt. (Mehsana & Patan) | License of Seed Production and Selling and Fertilizer and Pesticides selling |

NAIP Component - III: An Integrated Project for Research on Development Process and Sustainability of Livelihood in Selected Disadvantage Districts of Gujarat State.'To improve livelihood security of rural people in selected disadvantaged regions technology led innovation systems are implemented, encompassing the wider process of social and economic change covering all stakeholders. VIKSAT in collaboration with SDAU will carry activities like farming, propagation of vermicompost technology, Drip irrigation, micro sprinkler, improvement of water harvesting and conservation structure. Under this project, there are six clusters consisting of 18 villages. VIKSAT intervenes in Sanali Cluster Villages of Danta taluka of Banaskantha district. Activities carried during the reporting the periods are as follows:



Distribution of Seed under Seed Village Concept

Seed Village Concept: Improved G.T101 variety seeds of Pigeon pea (main crop in the area) were distributed and sown by 187 farmers and G.W-322 & G.W-273 variety seeds of wheat by 52 farmers. While the local variety yielded less, the newer varieties led to 40% more profit in pigeon pea and wheat. Additionally, good quality seeds were locally available.

Crop Diversification: Information related to crops and its suitability in the low water condition was given to the farmers. Brinjal, Lady Finger (Okra), Chilli, Bottle gourd seeds were distributed in the project village. Hybrid variety seeds of different vegetables (Area Suitable crop) were also distributed to farmers.

Promotion of MIS: To improve the productivity of irrigated land, improve use-efficiencies of water, energy and nutrient, reduce human effort in agriculture, conserve scarce resources such as water and electricity, extend the benefits of irrigated agriculture to more people with the available water, to facilitate better crop management through Fertigation and Chemigation, demonstration of water conservation technology was promoted in the project area. Sprinklers were installed in 26.20 ha of Chhota Bamodara, Hathipagla and Sanali village.



In 2012-13, 28 farmers tilling 26.20 Ha. of land were covered. Cumulatively, 98 farmers and 97.01 Ha. land has been covered.

Promotion of Horticultural Crops: 1450 saplings, including Custard Apple (670) and Lemon (780) were distributed to 391 farmers of Hathipagla, Chhota Bamodara, and Sanali village for plantation on farm boundary. Additionally, 600 teak plants were distributed to the farmers of the Sanali cluster.

Animal Husbandry: To screen the livestock for diseases, four cattle camps were organized in the project area. 855 cattle were provided medical care and assistance in the form of surgical intervention, deworming, artificial insemination, gynaecological check up and treatment, etc. A tonic for the livestock was distributed to 160 farmers during the camp.



Training and Exposure visit: Various trainings & exposure visit were organized for the capacity building of the farmer clubs as provided below:

| Details | Topic | Place | Date | Participation |
|----------------|--|--|----------------|---------------|
| Exposure Visit | Improved Agriculture Practices - Cumin, Castor, Vegetables | Agri Fair Krishi Vigyan Kendra, Kherva, Mehsana | 5-6 Mar 2013 | 205 |
| | Fruit cultivation- Pomegranate, Drip Irrigation system Vermicompost unit | | | |
| | Cumin Processing unit at campus | | | |
| Trainings | Farm mechanization | Agri. Tech Asia Exhibition 2012 Mahtama mandir-Gandhinagar | 6 Sep 2013 | 12 |
| | Post harvest technology | | | |
| | Micro irrigation | | | |
| | Conservation and Breeding of Medicinal Plants | SDAU, Dantiwada | 19 Mar 2013 | 21 |
| | Good Agricultural Practices of Cumin | CRSS, Jagudan | 20-22 Dec 2012 | 80 |
| | Good Agricultural Practices on Cotton & Fennel | KVK, Kherva | 23-25 May 2012 | 65 |
| | Quarterly Block Level Farmer Clubs Meet | Gadhvada sangh, Satlasana. | 3 May 2012 | 44 |
| Total | | | | 427 |

Ravine Land Development

VIKSAT, with assistance from Global Environment Facility (GEF) - United Nations Development Programme (UNDP), Small Grants Programme (SGP), initiated a project for restoration and stabilization of ravines through appropriate soil and water conservation measures and improved vegetative cover. The activities covered 67 ha of degraded land in three villages of Satlasana Taluka. VIKSAT collaborated with various departments /agencies like Gram Panchayat, Forest Department and Agriculture University to plan and implement the project.



The local institutions viz., TGCS were strengthened by helping them secure tenure over the land in the form of long term lease with emphasis on the principle of universal membership and the inclusion of women and marginalized sections. The P.Is undertook a range of simple, easy to implement technologies such as Bori Bundhs, gully plugs, stone wiers etc. Peoples' participation and ownership of the processes characterized the activities undertaken.

The small and marginal farmers with a land holding on an average 1-1.5 ha of dry land were the immediate beneficiaries. Around 585 households and a population of 2437 were covered under the project.

The physical activities undertaken are 7607 cu. Mt. of trench excavation in sloping land, 1229.23 cu.mt. of bunding along the trenches, 47 earthen bunds, pitching on earthen bund, 69 bori bundh, plantation of 468 kgs of grass, plantation of over 35000 trees and 20000 nursery plantations. Around 300 mango plants were distributed. Watering and caring for

plants covering 37.37 Ha. of land under social fencing was also undertaken.

1. Strengthening institutions

Local communities have managed their common lands through strong institutional mechanisms for democratic decision-making and conflict-resolution in the process of protection of land. This has ensured an increase in awareness about the status of the natural resources and skill up-gradation of the local communities.

2. Environmental improvement

Due to restoration of the ravines, there has been an increase in vegetative cover, improvement in the quality of water, reduction in run off. The water level increased 2/3 feet, and the expansion of the ravines has been controlled.



3. Income generation

In the project village, employment for 8881 man days were generated which led to timely provision of agri-inputs. The project was converged with various stakeholders i.e Gujarat Land Development Corporation, Mahatma Gandhi National Rural Employment Guarantee Scheme, National Agricultural Innovation Project and Panchayati Raj Institutions.

Revolving Fund

Sir Dorabji Tata Trust, Mumbai had given a fund of Rs. 50 lakhs to VIKSAT to meet various financial needs of village level institutions and taluka level federations of Satlasana and Bhiloda taluka. A Revolving Fund Management Committee (RFMC) was formed for efficient utilization of the fund. Rs. 27 lacs were disbursed and cumulative loan of Rs.101.72 lacs has been disbursed from the year 2004 among four federations of Bhiloda and Satlasana talukas.

Peoples Biodiversity Register

The increasing concerns about dwindling biological resources led to the Convention on Biological Diversity (CBD), negotiated and signed by 193 parties at the Earth Summit at Rio de Janeiro in Brazil in June 1992. India became a Party to the convention in 1994. The main objective of the convention is conservation of biological diversity, sustainable use of the components of biodiversity, fair and equitable sharing of benefits arising out of the utilization of genetic resources.

Taking cognizance of provisions of the CBD, and to deal with extensive pressure on our biological resources, Government of India has enacted Biological Diversity Act 2002 and Biological Diversity Rules, 2004. In accordance with the Act, the National, State and local level mechanisms have been provided for implementation of the Act.

Biodiversity Management Committee is constituted in accordance with Biological Diversity Rule, 22(1) of the Act. The People's Biodiversity Register (PBR) is to be prepared by BMC in consultation with a local technical Support Group. As a pilot project, the Gujarat State Biodiversity Board has appointed VIKSAT as the Technical Support Group for mentoring the local bodies in constituting Biodiversity Management Committee (BMCs) to prepare a People's Biodiversity Register (PBR). BMCs are prepared with the purpose of promoting conservation, sustainable use and documentation of biological diversity including preservation of habitats, conservation of land races, folk varieties and cultivars, domesticated stocks and breed of animals and micro-organisms and chronicling of knowledge relating to biological diversity.

Trainings /workshops attended by staff

| Sr. No. | Date | Subject | Organized By | Venue |
|---------|------------|--|---|--|
| 1 | 20/03/2013 | Strengthening the implementation of the Biological Diversity Act and rules with focus on ABNS Provisions | Gujarat Biodiversity Board, Gandhinagar | Gujarat Forest Research Centre, Gandhinagar |
| 2 | 04/03/2013 | Environmental Leadership & Conflict Resolution in Natural Resource Management | IIFM Bhopal | Sasan Gir, Junagadh |
| 3 | 19/03/2013 | Strengthening the implementation of the Biological Diversity Act and rules with focus on ABNS Provisions | Gujarat Biodiversity Board, Gandhinagar | GEER Foundation' Gandhinagar |
| 4 | 21/03/2013 | World Forest Day | Gujarat Forest Research Institute | Gujarat Forest Research Institute, Gandhinagar |

VIKSAT will facilitate BMCs in preparing 5 PBRs each in Satlasana taluka of Mehsana District and Bhiloda Taluka of Sabarkantha District. During the reporting period 10 BMCs one in each panchayat were formed.

Joint Forest Management Programme

With the intervention of VIKSAT Bhiloda Field office the work of regeneration of forests is being undertaken by the Tree Growers Cooperative Societies (TGCS) of Bhiloda Taluka. In all, 77 TGCS have been formulated, 56 of which have been registered under the Cooperative Society Act. Around 15000 hectare area of Forest Land is protected by the joint efforts. On regeneration of the degraded forest, people are getting Non Timber Forest Produce like the fodder, fuel, Timru leaves etc.

Strengthening the SHGs

The Japanese International Cooperation Agency (JICA) had funded for Gujarat Forestry Development Project Phase - II. Under this project the SHGs were formed by Sabarkantha Forest Division. The institutional arrangement under the current implementation strategy for the Gujarat Forestry Devp. Programme, Provisions for the appointment of a Site Manager as an interface between the Forest department and the staff of the resource organization's (Capacity building team and Livelihood enhancement Team). The Site Manager provides mentoring support to the team members of the resource organization and helps in planning & implementation of the various interventions. In this reporting period commissioned by GIZ, the German Devp. Cooperation Agency, VIKSAT continued to provide the human resource as a Site Manager till Dec, 2012. Site Manager works for the 3 Forest division of Sabarkantha of Gandhinagar Forest Circle.

Watershed Development Programme

A fine balance between the ecosystem and human system is a pre-requisite for sustainable environment and better quality of human life. However, over exploitation of groundwater coupled with reduction in natural recharge has led to severe decrease in groundwater availability. Needless to say, livelihood and natural resources such as land, water, vegetation and livestock are inter-linked. The impacts of human-made calamities are thus often seen and are likely to continue. To restore the ecological balance and increasing productivity of land, thereby securing lives and livelihoods, watershed development is one of the many interventions. VIKSAT implements four watershed projects in 18 villages of the Poshina belt of Khedbrahma Taluka of Sabarkantha district. In this year, 555.89 ha were treated under this programme. Cumulatively, about 1826.84 ha of the land have been treated. In the four watershed projects, 'shramdaan' (contribution of voluntary labour) worth Rs. 6,27,764/- has been done.

Participation, capacity building & transparency

In watershed development programme, not only the Private Property Resources but also the Common Property Resources are developed, managed and maintained with active involvement of the local community. For this to happen, it is highly important

Gamar Devabhai Bholabahi had all reasons to be happy. For a marginal farmer with 2 acres of rainfed land, providing for a family of seven was a major challenge. However, after participating in the improved agriculture programme under the Navamota Watershed project of IGWDP, NABARD, Devabhai took some informed decisions and never needed to look back. While previously he grew only rainfed crops and occasional summer crops in case of good rains, in 2011, he grew 7 quintal cotton in 0.40 ha of land fetching a net income of Rs. 20700.00. In 2012, he participated in the castor (GCH-7) demonstration in 1 acre of land with the support from SDAU, Dantiwada. By adopting scientific practices of castor cultivation there was an average increase of production by 60 %, leading to increase in net income by 40.34% along with fetching fuel wood from the crop.

that every stakeholder in the watershed accepts and implements the recommended management plan and is involved in the planning, implementation and maintenance phases of the project.

VIKSAT has formed three distinct forms of institutional spaces during interactions with the community to increase the participation and involvement of the stakeholders. There are 14 Village Development Committee (VDC), 58 Self Help Group (SHGs), 11 Farmers club (FC) and 3 women federations at project level. 63 meetings including organizing Gramsabha (5), VWC meetings (42) and awareness generation meetings (16) were conducted wherein 1,364 people, including 1,018 males and 346 females of 18 villages had participated.



NABARD Supported project

Sembaliya watershed project

Under the Watershed Development Fund (WDF) programme of NABARD, the project is in the fourth of the 'Full Implementation Phase (FIP)'. So far, treatment measures have been undertaken in 1087.76 of land of which 234.91 Ha was covered in the current year.

NABARD-IGWDP, Supported by KFW, Germany Three watershed programmes are supported by NABARD-IGWDP (KFW funded).

Navamota Watershed Project

The project has entered into the third year of the FIP spread over an area of 898.92 Ha. So far, watershed treatment measures have been undertaken in 498.05ha. of land in which 165.10 Ha of land was treated in the current year.

| Sr. No. | Activities | Units | Total (in four WS areas) |
|---------|------------------------------------|-------|--------------------------|
| 1 | Farm Bund (FB) | Cumt | 22804.13 |
| 2 | Stone Outlets (SO) | No | 224.00 |
| 3 | Stone Bund (SB) | Cumt | 1395.71 |
| 4 | Stone Gully Plugs (SGP) | Rmt | 573.29 |
| 5 | Continuous Contour Trenches (CCT) | Cumt | 41.00 |
| 6 | Water Absorption Trench (WAT) | Cumt | 15.91 |
| 7 | Earthen Gully Plugs (EGP) | Rmt | 16.50 |
| 8 | Farm Pond | Cmt | 224.81 |
| 9 | Strengthening of Existing Shramdan | No | 1.00 |

Ratanpur and Matarwada Watershed Project

In the Capacity Building Phase (CBP), 88.37 Ha (92%) and 68.83 Ha (68%) of land has been treated under either of the project areas.

The Full Implementation Phase (FIP) was sanctioned in June after the work season. Both the projects are currently in their first year of the FIP spread over three years covering watershed area of 1073.26 Ha and 1164.63 Ha respectively. So far, treatment measures have been undertaken in 15.48 Ha and 1.28 Ha of land respectively.

Drainage line Treatment:

3 Gabion structures, 6 Nalla plugs and 4 check dams were built under drainage line treatment work in Sembaliya and Navamota WS areas. Due to the small water harvesting structures, a command area of 64.13Ha. land was developed. The water harvested in check dam helps to increase water level in nearby wells. As a result, farmers do not directly lift the stored water for irrigation from the structure but increased water level helps farmers to irrigate additional area of 30.38 Ha.

Afforestation work:

To increase vegetation coverage and reduce soil erosion, plantations were undertaken in individually owned farmlands in the area under WS traetment. About 16250 plants of Teak, Eucalyptus, Neem, Bamboo, Mahua, Amla etc and 6875 plants of Agave and Gliricidiya were planted on bunds under watershed development programmes. The Grass seeding and seed sowing was undertaken in 28.36

Ha of land. The project has recorded 60-70% of survival of the plants.



Under the WS project, the forest area development work was done in the ridge portion of the WS area to enhance vegetation and reduce the runoff water. With the support of Joint Forest Management

| Sr. No. | Activities | Units | Total |
|---------|-----------------------------------|-------|---------|
| 1 | Water Absorption Trench (WAT) | Cumt | 2323.00 |
| 2 | Continuous Contour Trenches (CCT) | Cumt | 1690.97 |
| 3 | Stone Gully Plugs (SGP) | Rmt | 594.79 |
| 4 | Stone Bund (SB) | Cumt | 402.02 |

Committee (JFMC) of Sembaliya and Navamota watershed areas, about 358.25 Ha forest area was treated in current year amounting to cumulative 675.49 Ha of area being treated.



The tides of time mocked her. Mere subsistence was a challenge. Her husband had deserted her and her father and sibling died an untimely death. Gamar Dharmiben, a twenty six year old illiterate was burdened with the responsibility of the family of his brother, her own children and the ancestral unproductive farm land mortgaged during prolonged illness of her father and brother. The land (1.205 Ha.) situated at the foot hills was rendered uncultivable due to gully formation and top soil erosion.

Under the Watershed programme, Dharmiben participated in the trainings and within three months, with technical support from VIKSAT team, she single handedly built the watershed structures which helped in checking run-off, improved the soil quality and increased the fertility.

By the end of the year, the gross economic return from farming increased by 200%. She received an amount of Rs15, 041 which she used partly to free her mortgaged land and partly in agriculture. She also bought a gold nose pin and a locket. With the increase in the production of maize, she is able to ensure food sufficiency for her family. With increase in income, Dharmi ben plans to construct a well, increase the productivity of the land and invest further in growing wheat.

Trainings imparted under Watershed Development Programme

6 training programmes and one exposure visit were organized under watershed development projects in which the members (306) of the PIs, Viz. VWCs, Farmer clubs and SHGs had participated, including 240 male and 66 females. The major objectives were to orient each stakeholders about approach of Watershed Development Programme, community mobilization and People's participation, importance of soil moisture conservation activities in arable and non arable land, women development and agriculture and horticulture development.



A brief record is mentioned herein

| Sr. No. | Date | Training Title | Participant profile | Participants |
|--------------|-------------|---|------------------------------------|--------------|
| 1 | 03/01/2013 | Exposure cum learning visit on watershed development and Management | VWC, Farmers and SHG members | 40 |
| 2 | 7-8/01/2013 | Training on Micro-Irrigation System | VWC and farmers club members | 103 |
| 3 | 14/02/2013 | Orientation training on watershed development and Management | VWC member and farmers | 36 |
| 4 | 19/02/2013 | Training programme on Kitchen Gardening | SHG members | 30 |
| 5 | 21/02/2013 | Training programme on Soil and moisture conservation measures | VWC Members and leaders | 36 |
| 6 | 22/02/2013 | Training on Livelihood activities | Widow, Landless & poorest families | 26 |
| 7 | 22/02/2013 | Training on Vegetable cultivation | VWC and farmers club members | 35 |
| Total | | | | 306 |

Agriculture Development under watershed development programme

Farmers, especially, the marginal and small landholders often do not possess the knowledge and resource base to ensure a good return from their land holding. Supporting them with timely supply of inputs on appropriate agricultural practices, land and water management, is of utmost

importance to ensure food and nutrition security, especially in the tribal dominated regions. VIKSAT promotes agriculture development through providing the horticulture plants (210) like mango, lemon and guava, vermi compost (30), creeper vegetable cultivation(3) and Ladies' Finger cultivation (20).



20 units of kitchen gardens of 0.01 Ha. each, were demonstrated to increase access to fresh vegetables, inclusion of vegetables in the regular diet and curb malnutrition. Developing irrigation resource through well deepening (2) and pipeline (1) also increased access to irrigation water.

Crop Demonstration

The technique of crop demonstration serves as an important tool to convince the farmer about the value of an innovative idea introduced to them as an alternative to the existing practices. Unless the farmers see the outcome or results of the



recommended practice in comparison with their existing practice with their own eyes and experience, it becomes difficult to make the farmer to adopt the recommended variety or practice.

The oat fodder demonstration was converged with "Regional Station for Forage Production and Demonstration, Palej, Gandhinagar. During reporting year, 31 demonstrations of wheat crop, 23 demonstrations of Lucerne fodder (Rajko) and 15 demonstrations of Oat fodder were carried out. These demonstrations helped in establishing the usefulness of promoting sustainable agriculture production.

Result of Wheat demonstration taken under watershed development programmes

| Sr. No. | Details | Sembaliya | Navamota | Ratanpur | Matarwada |
|---------|---|-----------|----------|----------|-----------|
| 1 | No. of Plots | 22 | 4 | 3 | 2 |
| 2 | Average Plot Size (Ha/Plot) | 0.2 | 0.4 | 0.4 | 0.35 |
| 3 | Average Production (Kg/Plot) | 761.4 | 1504.3 | 1489.07 | 1319.8 |
| | | 440 | 800 | 820 | 780 |
| 4 | Average Cost Rs./plot | 5337 | 9917 | 7893 | 7893 |
| 5 | Average Income [Rs/plot] | 10660 | 21275 | 20777 | 18417 |
| 6 | Average Net Income Over inputs[Rs/Plot] | 5323 | 11358 | 12884 | 10524 |
| 7 | Average per Ha | 26615 | 28394 | 32209 | 30069 |
| 8 | Cost Benefit Ratio over net income | 1:1.00 | 1:1.15 | 1:1.63 | 1:1.33 |

Result of fodder demonstration taken under watershed development programmes

| Sr. No. | Details | Oat | | Lucerne | | |
|---------|--|----------|----------|-----------|----------|----------|
| | | Navamota | Ratanpur | Sembaliya | Navamota | Ratanpur |
| 1 | No. of Plots | 10 | 5 | 10 | 10 | 3 |
| 2 | Total Plot Size (Ha/Plot) | 0.1 | 0.1 | 0.2 | 0.2 | 0.2 |
| 3 | Total plot Area in Ha | 1.00 | 0.50 | 2.00 | 2.00 | 0.60 |
| 4 | Average Fodder Production (Kg/Plot) | 4919 | 4870 | 13216 | 13230 | 13207 |
| 5 | Average Cost Rs./plot | 2605 | 2505 | 5208 | 4967 | 4766 |
| 6 | Average Income [Rs/plot] | 5903 | 5844 | 19824 | 16538 | 16508 |
| 7 | Average Net Income Over inputs [Rs/Plot] | 3298 | 3339 | 14616 | 11571 | 11742 |
| 8 | Average per Ha | 32978 | 8348 | 73080 | 57853 | 58712 |
| 9 | Cost Benefit Ratio over net income | 1:1.27 | 1:1.33 | 1:2.81 | 1:2.33 | 1:2.46 |

A woman farmer becomes a role model for vegetable cultivation in tribal area

A Case Study

In last two decades, the natural resource management (NRM), be it water, land and forestry in India, has seen a shift from being largely in the realm of the state to being handed over to the hands of the people. VIKSAT has been instrumental in facilitating discussions on people centered policies related to natural resource management. Strengthening women's participation has remained a cornerstone for planning, implementation and evaluation of the watershed development programmes implemented by VIKSAT. Lack of ownership of land and productive assets, lack of control over resources, heavy workload due to shortage of drinking water, fodder and fuel, high number of work hours, lack of skills for income generation from agriculture based activity, lack of control over earnings, poor decision making space in the family, reduced income due to excessive pressures on land and natural resources, poor social status, restriction on mobility are some of the factors affecting women's participation in development activities.

To create space for women, create opportunities for economic improvement of women, the interventions needs to be specifically built after carefully analysis of the situations specific to her. The following narration demonstrates the strength of a woman farmer in taking the right decisions to strengthen her livelihood. Devaliben Narsabhai Bubadiya is a marginal farmer of Bubadiya Chapara village of Khedbrahma taluka of Sabarkantha District. She was an active participant in the agriculture development activities under watershed development programme implemented by VIKSAT with supported by IGWDP-KFW.

Before involvement in the programme Ms. Devaliben family was cultivating rainfed crops in their field during Kharif and Rabi season (provided the rainfall was good enough). But after her participation in watershed programme, she underwent the capacity building programmes and with necessary inputs, she decided to try out vegetable cultivation using the trellis (Mandva) system in their 0.3 ha (30 Gunta) of land in summer 2012. This was the first of its kind in the project area. In this, demonstration of vegetable cultivation was undertaken by her wherein she grew cluster beans (Gawar) and field bean (Valor Papadi).



The cost of cultivation of vegetables was Rs.19,625 and the total production of vegetables amounted to 57.45 quintal from her land. Within six months, she earned a handsome net income of Rs. 64,099 after selling the vegetables in the village and nearby market.

The crop economics shows that the net income has been Rs 2,13,663 / ha as compared to Rs 1,24,634 /ha earned prior to this initiative. This indicates that vegetable cultivation under trellis system has resulted in an impressive increase of 71.43% of net income over the rainfed crops.

Today, she is sharing her success story to other women's in tribal area and inspired to women's to take vegetable cultivation at their field.

MISSAL: Towards holistic development

The project Micro Irrigation System for Sustainable Agriculture and Livelihood (MISSAL) aims towards achieving water use efficiency by installing drip irrigation. This increased the land productivity and production and minimized the wastage of irrigation water.



Background

With increasing pressure on the water resources, erratic rainfall, severely depleting levels of ground water level, adoption of efficient ways of water management for sustainable production is the need of the hour. For efficient water management, VIKSAT also undertook a five-year programme for promotion of state of the art tailor made micro irrigation system suitable to the land conditions of the tribal belt of Poshina. The financial support for the same was received from John Deere Foundation, product and technical support from John Deere Water and implementation support in the form of project monitoring and monitoring by United Way of Mumbai. In 2010-11, a pilot was undertaken wherein three systems were installed by a group of ten farmers. Following the successful implementation of the pilot, 4 MIS were installed in 3.67 ha land area and covering 10 farmers under drip irrigation system. Cumulatively, 7 MIS were installed in 6.05 ha land area & covering 20 farmers.

Initial Roadblocks

The farmers owned small patches of land that was not suitable for MIS installation. Factors like poor economic condition of the farmers, low level of acceptability of the improved technology, lack of awareness regarding vegetable cultivation, poor market linkages for selling of the agri-produce were some of the challenges. Mobilising the farmers,

collecting individual contributions for the installation were also issues that needed to be dealt with. Traditional practices of irrigation and farming are deep rooted. The team faced difficulties in motivating the farmers to adopt the new methods of irrigation (even during the monsoons), follow the prescribed sowing schedules and maintaining records of crop. The cost of the liquid fertilizer was also very high and thus was not affordable.



Outcome

What started on a pilot basis in 2011, in the remote tribal belt of Gujarat with a few farmers with small landholdings gradually set an example for the rest. In summers, due to non availability of irrigation water, any kind of cultivation, let alone vegetable cultivation was a far-fetched thought for the farmers. However, with the installation of MIS under MISSAL, the farmers were able to cultivate vegetables like Okra, cluster beans, brinjal and chilly on commercial basis for the first time, in their land. The success stories of the initial programme participants were the stepping stones for the others. As many as 7 MIS were installed in 6.05 Ha. of land area covering 20 farmers. Apart from providing continuous technical inputs during each stage of crop by the project staff, agronomy support in the form of liquid fertilizer for fertigation of crop and vegetable seeds of cluster bean (1.5 kgs.) and Okra (2.0 Kgs.) were provided. Additionally, insecticides were also made available to two farmers to curtail the attack of cutworms.

Crop Pattern: There was a change in cropping pattern from cultivation of pulses to vegetable and additional summer crop. Previously, not a single farmer cultivated horticultural crops. After the MIS

To cultivate vegetables in their landholding with inadequate irrigation facilities was never considered as an option by Saybabhai and many other farmers of Umbarva village. Till.... along with the other farmers, he partook in the "Sustainable Agriculture and Livelihood through MIS Programme" of VIKSAT supported by the John Deere Foundation. With the help of programme, they were able to install drip irrigation in 0.87 ha of land.

Previously, the group members were cultivating rainfed crops only. In the first year of MIS programme, Saybabhai opted for vegetable demonstration in 0.17 ha (17 Gunta) of land, wherein he grew cluster bean (Gawar), okra (lady's fingers or Bhendi), brinjal and cucumber (additional). The cost of cultivation of vegetables was Rs. 4156. The total productions of vegetables are 16.09 quintal from the 0.17 ha (17 Gunta) of land. Within a year, he reaped a handsome income of Rs. 8835.00 after selling the vegetables in the village.

Not only did the Saybabhai succeed in changing the cropping pattern but also the family benefitted by inclusion of vegetables in their routine diet. The increase in area under irrigation, increase in crop yield and cropping intensity, decrease in man days in labour work, there was a noticeable increase in the net income. He set an example for the others to emulate from.



programme, 45% (9) farmers cultivated horticulture (Vegetable) crops.

Cost economics: The farmers of the area are resource poor. The cost of cultivation increases due to human labour and accessing irrigation water. The installation of MIS helped in reducing the costs of cultivation. Human labour was substantially reduced by the operations in irrigation, fertigation and weeding. Controlled and measured delivery of water and essential nutrients to the crop root zone through the improved technology has reduced wastage of irrigation water through seepage, run off and deep percolation as compared to conventional methods. It is energy efficient and not labour-intensive process. Application of fertilizer using the drip irrigation fertigation has increased the fertilizer use efficiency.

Increased productivity: There was increase in the net sown area under cultivation. There was increase in productivity per acre (679%) due to vegetable crop. Drip irrigation improved crop growth. Early sowing of cotton crop due to access to irrigation helped the programme participants to get more production, as compared to other farmers.



Reduction in distress migration: Prior to the use of technology, migration to other districts or neighbouring state was the major coping mechanism for the farmers for 8 months. However, due to increased income and food sufficiency, distress migration is no more a means of survival.

Improvement in quality of life: With increased saving of irrigation water, increased income from the produce and change in cropping pattern, there has been a change in the food intake habits. Previously, vegetables were consumed once a

week. 50% of the participants have enriched their daily diet chart with fresh vegetables. There was a consequent reduction in health related problems.

PROJECT MARCH

The project (initiated in 2012), Multipurpose Agriculture Resource Centre for Holistic development (MARCH) was born out of the need to ensure optimum and sustainable utilization of available resources and lay foundation of potential building blocks for wellness and well being.



Background

In spite of being depicted as a well developed state, the tribal pockets in Gujarat have lagged behind in the process of sustainable development. Processes like environmental degradation, steep rise in industrialization and urbanization, poor literacy rates, poor infrastructure development, inadequate reach of the government administrative machinery, have added to their economic backwardness and misery and led to further alienation from the mainstream development. Poverty, indebtedness, and poor productivity of the limited land holdings are factors that pushed the tribals to migrate to other parts of the state, thereby adding to their vulnerability.

In spite of several well meaning attempts by the government in the direction of poverty alleviation through integrated tribal development programmes, yet there were no tangible results. A thorough needs assessment by VIKSAT revealed that the issue needs to be addressed through an integrated approach wherein the primary producer is supported at multiple fronts say, training, access to financial services, input supply, access to information about market and so on. The foundation for the Aravali Agriculture Resource and Training

Center (**AART**) was thus laid. **AART** is a representative structure - built along the lines of a federation. It is currently an informal structure with representatives from the existing peoples' institutions like Village Watershed Committees, SHG Federation and Farmers clubs etc.

AART is a step towards organizing the primary producers, build their capacities on scientific means of agriculture, develop viable linkages with quality services and agri-inputs, so as enhance productivity of land, ensure food sufficiency and augment the net income from agriculture. AART is a platform to provide structured education to the farmers leading to transfer of knowledge and skill. But the need was not only to build capacities for sustainable agriculture but also to help the farmers to gain timely access quality agriculture inputs, sell their produce to the market without having to depend on the local and exploitative money lending mechanisms. AART also facilitates access to market services and credit to the communities in a service mode so as to increase their income and livelihood security.



Watershed Plus

The 'piece meal' approach to development does not hold true for any area, and the tribal belt is no exception. It was realized that while watershed programmes were instrumental in sowing in the seeds of development, yet, much more needed to be done to complement the gains achieved in the WS areas. **Watershed plus** also termed the Sustainable Livelihoods and Productivity Enhancement. In watershed programme, the resources augmented and economic plans developed are made the foundation to create new livelihoods and raise productivity levels in area.



Capacity Building programmes: Gradual and consistent capacity building by increasing the participation of people in village development activities is critical for long term sustainability of the same.

Awareness Building: A series of awareness and village level meetings (14 - Watershed Plus covering 637 participants and 7 under Watershed Project covering 261 participants) were organized. The VWC also conducted 8 meetings covering 135 VWC member and staff have participated.

Exposure visits: To learn about scientific Package of Practices of wheat crop, an exposure visit was organized to Trellis wadi at village Bubadiya Chapra for 32 people from Sembaliya watershed programme. An exposure cum learning visit was also organized at "Krishi Mela" by Farmer Training Centre, Khedbrahma in which, farmers (44) and VIKSAT staff participated. 46 farmers visited Thana Nargadh and Dhareda villages of Danta taluka of Banaskantha district to learn about horticulture and vegetable cultivation with drip irrigation system.

Institution building: To develop leadership quality among the SHGs members, a one day training programme was organized for 33 SHGs members. One day training programme on role of people institution members in village development programmes was organized for 47 leaders of project area.

Field Days: Field days on cotton (12th Nov.) and castor crops (21st Dec 2012) were organized at Delwada and Umbarva village seeking participation from 83 and 45 farmers respectively.



Crop Demonstrations: To demonstrate the importance of chemical and organic fertilizers, their efficient utilization, Bio-fertilizers, new varieties of Seed, Seed Treatment, Micro nutrient and Biological inputs, 55 demonstration of different types of crops including food crop, cash crop and fodder were undertaken. The crop demonstrations have led to adoption of PoP thereby increasing crop productivity and net income as compared to the traditional practices.

| Sr. No. | Name of crop | Name of Variety | No of Demonst rations | Average Grain Production Qtl/Ha | Average Fodder / Fuel Production Qtl/Ha | Cost of cultivation (Rs./Ha) | Total Income (Rs/Ha) | Net Income (Rs/Ha) |
|---------|--------------|------------------------|-----------------------|---------------------------------|---|------------------------------|----------------------|--------------------|
| 1 | Green Gram | Gujarat Green Gram - 4 | 6 | 9.80 | 3.83 | 14209 | 39191 | 24982 |
| 2 | Cotton | MRC-7301 | 6 | 27.8 | 5.38 | 41991 | 89809 | 47818 |
| 3 | Castor | GCH-7 | 5 | 28.9 | 20 | 45095 | 98260 | 53165 |
| 4 | Pigeon Pea | G.T.-1 | 10 | 14.57 | 35 | 21315 | 62733 | 41418 |
| 5 | Wheat | GW-366 & 466 | 28 | 37.25 | 22 | 26190 | 52125 | 25935 |

Crop seed kit: To replicate the achievements of the crop demonstrations undertaken under the project, popularize the variety, undertake replacement of seeds, seed kits along with technical inputs are provided. Under replication of demonstration, 2639 no. of demonstration will be conducted during second year project period. 60 demonstrations of the seed kits of green gram, cotton and castor crops were done.

| Sr. No. | Name of crop | Name of Variety | No of Demonst rations | Average Grain Production Qtl/Ha | Average Fodder / Fuel Production Qtl/Ha | Cost of cultivation (Rs./Ha) | Total Income (Rs/Ha) | Net Income (Rs/Ha) |
|---------|--------------|------------------------|-----------------------|---------------------------------|---|------------------------------|----------------------|--------------------|
| 1 | Green Gram | Gujarat Green Gram - 4 | 30 | 8.45 | 3.2 | 13750 | 37512 | 23762 |
| 2 | Cotton | MRC-7301 | 15 | 20.75 | 5.38 | 38480 | 73033 | 34553 |
| 3 | Castor | GCH-7 | 15 | 19.55 | 20 | 66413 | 30557 | 35857 |



Kharif Maize Stabilization Programme

Maize, a staple food crop in Gujarat, is largely grown by farmers in tribal dominant districts. However, the average production of maize was 21.41 kgs. Per Ha. in the Sembaliya watershed area (Baseline survey, Sembaliya, 2008). It was further found that a large number of families could secure only 5 to 6 months staple maize diet from their farms. Thus, to target hunger and poverty, targeting for year round food sufficiency of the maize grower at the local level, the Kharif Maize Stabilization programme was initiated by VIKSAT in five villages of the Sembaliya watershed area. In the longer run, KMS also aims to achieve fodder and seed sufficiency at local levels, in the long run. The programme was initiated with 272 farmers, under the core, extended and campaign mode. In this programme GM-2 and GM-6 variety given to 249 and 23 farmers respective variety in 0.5 acre cultivation land area.

Outcome: The average yield of GM-2 variety was 7.48 quintal / plot and GM-6 variety was 8.23 quintal/plot. The highest production of maize was taken of 9.62 quintal /plot and lowest of 6.2 quintal/plot.

Training and Capacity Building

Farmer Field School (FFS)

Under KMS programme 2012, 20 Farmers Field School (FFS) were conducted. In this FFS programme

303 participants including 291male & 12 female have participated. In these FFS programme, technical knowledge was imparted on topics such as Line sowing, Deep ploughing, Timely inter culture and weeding operations, Fertilizer application, Pest and disease management, Bund strengthening etc.



Training programmes

23 training programmes and 4 video shows were organized on PoP of Maize crop wherein 636 farmers participated.

Khedut Samwad programme

On January 27, 2013, a Khedut Samwad programme was organized at Delwada wherein around 150 farmers from six villages participated. Capacity building of the farmers on improved agriculture, video shows & exhibition were conducted.



Developing and managing water resources

To increase the storage and water holding capacity, wells were deepened (9) and strengthened (2) under watershed plus programme thus leading to assured water supply. This in turn has increased the productivity of the land. This has also encouraged the farmers to adopt better farm practices to increase the income and improve the fertility of land. Increased water availability has also prompted cultivation of horticulture and vegetable farming.



Maljibhai, marginal farmer from Kheroj owning 2 acres of land, could hardly eke out a decent living for his family by growing rainfed crops... till he learnt how to maximize the income from cultivating his land by adopting improved variety of seeds and improved package of practices.

In 2011, Maljibhai cultivated maize in 0.40 Ha. thereby getting a production of 4 qnt. of the crop. In 2012, with the support of CiNI under New Variety intervention, he adopted the scientific PoP to grow pigeon pea crop. This led to increase in production that not only increased the net income by 107.7% but also reduced drudgery by increasing fuel availability from the crop.



Lessons Learnt

Behaviour change of the farmers: Bringing practice change amongst the illiterate tribal farmers was a challenge. But hand holding on site support, continuous training and sharing of experiences have led to increased acceptance of package of practices of crops.

Meaningful Participation : A management committee formed by the P.I representatives to administer the AART centre ensured participation of SHG federations, SHGs, VWCs, and F.Cs

Liasioning: AART centre was registered under agriculture department for input of seed and insecticide and pesticide purchase and distribution and has received license from Agriculture department for the same.

A wheat seed programme through KVK, Khedbrahma and Sardar Krushinagar Dantiwada Agricultural University, SKDAU, was converged with Rabi planning programmes. The 50 seed kits of wheat variety of GW-496 and GW-322 were distributed to 50 farmers of project area.



EFSS (Enhancing Food and Seed Security):

Without a strong base of diverse seeds, food production is threatened by disease and climate change. To enhance food security, ensure the preservation of traditional cultural practices and values and to increase seed security, VIKSAT promotes the use of diverse seed types. To test the adoptability of the new variety seeds in rainfed area, 324 farmers from nine villages were involved in which they were introduced to a HI-1500 and HD 2987 varieties (from IARI).

To increase the adoption of scientific agriculture practices in wheat crops in Khedbrahma Taluka of Sabarkatha, training programmes (5) and video shows (5) were organized in which 266 farmers had participated. Information was given on seed treatment and sowing methods.

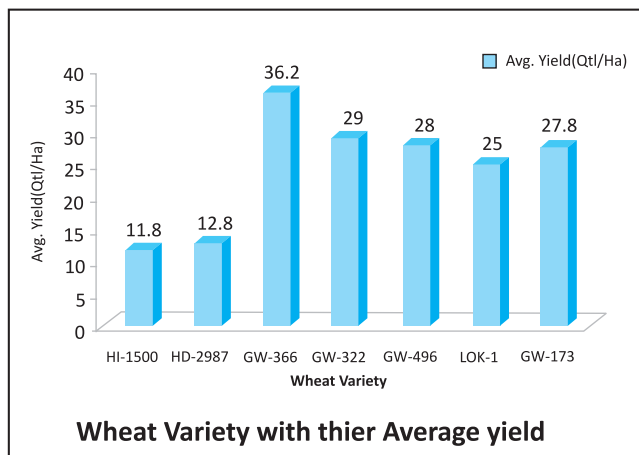
Farmer Field Schools: To provide experiential learning to the farmers on Irrigation management, Supplementary dose of urea, Weed control etc. 17 Farmers Field School (FFS) were conducted with a participation of 437 farmers.

Service Provider Meeting: 13 meeting of service provider were conducted. The major issues of KMS programmes, EFSS programme, data collection of farmers and follow up and monitoring of crops with farmers.



Outcome

For the project area, HD-1500 and HD-2987 (Pusa Bahar) are new varieties, which were cultivated in rainfed areas, with accessibility to irrigation water for once or twice only. The graph shows the wheat variety with their average yield (Qtl/Ha) in project villages.



Project Advisory Committee (PAC) Meeting: The 3rd Project Advisory Committee Meeting was organized on October 15th, 2012 at VIKSAT, Ahmedabad, to review the Sembaliya Watershed Plus Project. Prof. Bhim Singh Deora from Sardar Patel Krushi University, Dantiwada, Mr. Virendra from CInI, Ahmedabad, Director VIKSAT and entire implementation team participated in the same.

Monitoring visits: As many as 12 monitoring visits were done by CInI, Ahmedabad and SRTT, Mumbai to review the watershed plus, KMS and Rabi programmes. Dr. N.S. Malhi, Agriculture Advisor, SRTT, Mumbai, Ms. Vartika Jani, Executive Director, CInI, Mr. Sujit G Kumar, Team Leader, CInI, Ahmedabad visited on June 13, 2012 to review and visit the KMS sites and ongoing programmes and support in planning for next phase programmes.

Dr. Varma, Subject Matter Specialist (Plant Protection), Udaipur, visited the field plots, conducted field schools and provided technical guidance to farmers.





Visit of Mr. Nate Clark, Vice President, J.D.F, to VIKSAT's MIS programme area



Exposure visit by NABARD and DSC officials

Trainings and other events attended by staff

| Sr. No. | Date | Title of programme | Organized by | Venue |
|---------|------------------|---|---|-------------------------------------|
| 1 | 25, Apr 2012 | Workshop on Financial Literacy | IGWDP-NABARD, Gujarat | Sadguru Foundation, Chosala (Dahod) |
| 2 | 23, Aug 2012 | Water Supply Next Generation Shift..24x7 | Amdavad Municipal Corporation, Ahmedabad | AMA Complex, Ahmedabad |
| 3 | 21 - 28 Aug 2012 | Management Techniques for federating Farmers into Business Groups | Maharana Pratap Agriculture and Technology University, Udaipur, Rajasthan | MPUAT and ACCESS Development |
| 4 | 28 - 31 Aug 2012 | Institution for sustainable livelihood enhancement | Sadguru Foundation, Dahod | Sadguru Foundation, Chosala (Dahod) |
| 5 | 06 - 07 Dec 2012 | Regional Level Experience sharing and Review Workshop on watershed development programme | NABARD, Rajasthan | NABARD, Jaipur (Rajasthan) |
| 6 | 05, Mar 2013 | Ground water resource management with emphasis on artificial recharge and rain water harvesting | Central Ground Water Board West Central Region, Ahmedabad. | AMA Complex, Ahmedabad |
| 7 | 15 - 17 Mar 2013 | Training on People institution | VIKSAT, Ahmedabad | Ujjain |
| 8 | 22 - 23 Mar 2013 | State level annual review workshop for PIAs of WDF Watershed programme | NABARD, Gujarat | Sadguru Foundation, Chosala (Dahod) |

Sustaining Livelihood of the Rural Poor

The FASAL project under UPNRM started since 2009 to ensure livelihood development in a sustainable manner. The second phase of the project was introduced in October 2012 after the successful implementation of the first phase. The second phase has expanded the scope and volume of the project. The major interventions and achievements of the interventions are as follows:

Expanding Livelihood Options

One of the major challenges of the project was to expand the livelihood options for community without exposing them to any risk and with minimal environmental impact. Following are the activities supported under the programme:



1. Livelihood infrastructure development: Initially, the loans were given only for productive assets which can fetch direct income to the borrowers. It was felt that to increase the productivity of the asset acquired in the first phase, it is important to provide infrastructural support. The scope of finance was thus expanded to infrastructure development viz. shed for buffalo, fodder storage warehouse, fencing for crop protection etc.



2. Post harvesting value addition and storage: Post harvesting value addition and crop holding leads to more income from the harvested crop as compared to direct selling. FASAL provides loans for post harvest value addition processes viz. threshing, cleaning and bagging of grains, transporting the grains to market at the convenience time of the farmers and storing the grains till the best price is offered in the market.

3. Freeing mortgaged land: Making families free from debt trap of input sellers and commission has been already recorded as achievement of the project. This year, the scope of the project was expanded to free the families from land grabbers. The families who had mortgaged their land to money lenders and land grabbers at the time of distress and were unable to find a decent livelihood opportunity, were provided loan not only for freeing their mortgaged land but also to carry out farming in the land. The scope not only restored secured livelihood for these families but also saved huge areas of land from getting converted into lands for non - agricultural use.

Building Natural Capital

The project has contributed significantly in building the natural capital which is essential for agriculture and allied livelihood. In semi-arid areas of Patan and Bhuj, people took up activities viz. clearing land from juliflora, land leveling etc. In Satlasana and Bhiloda, people emphasized on water resource management.

1. Livestock development: Dairy is the lifeline of small and marginal farmers and women are the main actors. Thus, livestock continues to be at the centre of the programme. Purchasing of new animals, growing and purchasing fodder, selling milk etc. has remained the main outcome of the project. Additionally, the project has also contributed in purchase and rearing of other livestock viz. camel, bullock, sheep and goats in large numbers. The landless, poor and migratory population usually benefit from availability of easy finance for non milking animals viz. camel, sheep and goats. The project has financed 452 animals of worth INR 1,19,89,600/- of which 36 are non-milking animals.



2. Land Development & Soil Fertility Improvement:

The project has successfully moved from beyond crop loan and dairy loan and contributed towards basics of agriculture based livelihood viz. land development and soil amendment. Around 5493.86 Acre of land was treated for bringing more land under agriculture and increase productivity. Soil fertility improvement through IPM and INM activities was introduced in the Sami Taluka. A package of practices was adopted by the farmers for cumin crop cultivation. The farmers have reported reduction of input cost by 25% in the very first year without any reduction in the yield.

3. Water resource development: The project has substantially contributed across the project areas in developing, management and conservation of water. Repairing, reviving and deepening of dug-wells were encouraged to ensure storage and use of surface water and restricting the exploitation of scarce ground water. The pipelines laid for transportation of irrigation water resulted to saving water through evaporation and leakage loss. The diesel engines financed under the project helped the small marginal farmers in saving 33% of their produces which they had to pay in lieu of irrigation water. Some of these farmers are even earning additional income by selling irrigation water. With this support, 314.45 Acre of land have been brought under irrigation within the year.

Physical Capital Building

The durable assets are the stepping stones towards reduction of vulnerability and moving towards sustainability of livelihood. The project has substantially helped in building physical capital for the farmers for a secured present and a wealthier future.

1. Infrastructure development: The project has contributed in developing infrastructure at the family level which is directly linked to their livelihood viz. Dug well, bore well, land (freed from mortgaged) cattle shed, grain and fodder storage facilities etc

2. Farm Equipments and irrigation facilities: A large numbers of farm equipments and machineries were acquired by the small and marginal farmers. Due to lack of such equipments the farmers were unable to get production to the maximum potentiality of their land or losing a major chunk of their income by paying hefty rentals to access such equipments. The major equipments and machineries worth Rs. 56,09,850/- acquired by the farmers include trolley, thresher, diesel engine etc.

3. Post harvesting value addition facilities: The project has also able to create livelihood for both landholder and landless families by financing post harvesting value addition facilities.

Financial Capital Building

One of the major outcomes of the project was building financial capital for the SHGs and Farmers Clubs.

1. Increased Access to internal Saving: The assured access and adequate finance for livelihood requirement has helped the groups in expanding the scope of using their internal savings for reducing vulnerability in social front viz. health, marriage and education.

2. Increased saving: The increasing income and access to finance has helped the families for saving more and getting social security. Over the period of two years of the project, 18% (111) of the SHGs have increased their monthly saving amount.

3. Social security: The project has covered all the borrowers with compulsory asset insurance and life insurance.

4. Financial freedom to women: The increasing income has also helped women in getting access to family income and to control over it. The project has helped in getting more financial freedom in terms of spending on the own needs and creating assets that helps reducing their drudgery.

Social Capital Building

The project largely impacted in developing solidarity and strengthening community institutions.



1. Group Cohesiveness: The thrust of the project being shared liability, has made the group members more concerned to each others, built trust and created peer pressure. The participation of members in group meetings, performance of their responsibility and their accountability has increased through project participation.

2. Credit and saving discipline: The discipline of maintaining records and participation in group activities has improved in the groups. The Farmers Club has started organizing regular meetings and sharing their information, discussing their problems and taking up new initiatives.

3. Solidarity: A few of the farmers clubs has undertaken new activities viz. vegetable cultivation, adoption of IPM practice and purchasing of inputs in groups as a result of such solidarity and group

strength. The formation of SURE Producer Company Ltd by the Farmers Clubs participated in the project is one of the strong indicator of social capital built by the project.

Human Capital Building

One of the major contributions of the project was building human capital.

1. Managerial Skill Building: The SHGs, Farmers Clubs and similar producer institutions has been imparted both technical and non-technical trainings in different aspects viz. financial literacy, maintaining of records, leadership development, conducting group meeting and resolving conflicts.

2. Technical Skill Building: Technical trainings were imparted for improving production & productivity of different crops, dairy & allied livelihoods. All the project participants were given exposure visit to the similar activities undertaken elsewhere & best practices in the financed activities.

3. Leadership and Initiatives: The enhanced capacities and empowerment are visible through the fact that the group has strengthened with better participation of members, discipline in maintenance of records, better credit discipline, repeated loans, equity in benefit sharing, revival of defunct groups, formation of new groups and visibility of leadership and new initiatives by the group leaders.



Financing rural livelihoods has always remained a challenge. The project FASAL attempts to introduce non-conventional financing order so as to reach out to that section of the populace that is unreached by the formal banking system. This case study reveals how a group of charcoal producers were financed with a customized loan. The loan was given to a group who do not possess any kind of physical assets.

Prosopis Juliflora (Mesquite) also known as Vilayti Babool or Ganda Bavar in the local language is a weed introduced in the year 1988 in India. While it was found to be an invasive plant affecting the growth of other plants in its vicinity, it proved to be a source of livelihood for the Bhajanias, a landless community that ekes out a living by making charcoal out of ganda babool.

This community lives in the fringe of Phulpura village, Santalpur block of Patan district in the little Rann of Kutch. The private lands growing *juliflora* are taken on rent for the activity. The community is deprived of basic amenities, do not own physical assets and are excluded by the mainstream village community. Other than producing charcoal, they supplement their income by selling utensils against scrap in the nearby villages.

The community members are poor and debt ridden. Charcoal making requires a substantial amount of investment. The rent for land (that goes upto Rs. 1 lac.) consumes the major part of the cost. They usually borrow this amount from the local traders as a loan on the condition of selling them the charcoal at a rate fixed at the time of taking loan. The interest rate charged to them is as high as 36%.

VIKSAT started working with the community, facilitated formation of SHG and under the UPNRM programme, extended financial support to promote income generation through charcoal making.

A special arrangement.... providing customized services

After studying the requirement of the Jay Khodiyar SHG, of ₹2,75,000/- a site visit was made to meet the group members and design a repayment plan. Of the total amount, ₹1,00,000/- was extended to meet the fixed one-time costs to be incurred (in the form of land rentals to be paid in advance) against a monthly repayment arrangement. It was decided that the remaining amount would be paid back in the form of single premium after six months at the end of the season so that it can be repaid directly from the revenue without hampering the normal course of life. This reduced the installment amount (devoid of interest) reduced from ₹22,916 (if charged against the principal amount) to ₹8,333/-.

Incremental returns

This arrangement helped reducing the dependence on the traders, eliminating discrimination, reducing the cost by almost 16% due to low rate of interest; and increasing the revenue generation by around 41% since the group could earn more price by selling it at par with the market rate. As a result, the net profit catapulted to 855% more than the previous year.

The ripple effect

The key to success in charcoal making was timely access to customized and easy financial services. The savings reaped were invested by the community in their scrap against utensil business. Earlier, due to lack of liquid cash, they used to get utensils from traders in credit at a much higher price than the market rate. After selling the scrap to the scrap dealers they paid back their old loans and took utensils against new credits. In that way the profit margin was less. With the additional money they earned, they brought a Chaggada, (a three wheeled vehicle improvised from an Enfield motorcycle). Now, with the reduced rate of interest levied against the loans under FASAL, they bought the utensils in cash. Thus now they could not only reduce their drudgery but also multiplied the profit in the ancillary business.

Conclusion

Understanding the grassroots level implication, holistic analysis of the loan request and repayment schedule, the priority to reach out to those neglected by the society, extending a collective loan, capacity building of the group, hand holding and empathy....not much was needed to help the marginalized Bhajania community reclaim their self esteem and enlighten their lives.

"It always seems impossible unless it is done"
Nelson Mandela

Constant and consistent dialogue with the local communities is a pre requisite for sustainable development and to initiate change. People are capacitated with informed choices so that they are able to take decisions about equitable use of resources for their own economic development. Facilitating people's participation, as a strategy, cuts across all the thematic areas of interventions in VIKSAT. Building state and taluka level institutions, for management of natural resources has remained the forte of the organization. A brief report on the institutions that are currently operational, is presented herewith.

| Field office | Number of SHGs | Membership | | |
|--------------|----------------|-------------|-------------|-------------|
| | | Male | Female | Total |
| Bhiloda | 131 | 11 | 1676 | 1687 |
| Bhuj | 76 | 23 | 817 | 840 |
| Kheroj | 58 | 0 | 712 | 712 |
| Radhanpur | 80 | 70 | 1045 | 1115 |
| Satlasana | 244 | 1540 | 3210 | 4750 |
| Total | 589 | 1644 | 7460 | 9104 |

Self Help Groups

Formation and strengthening of SHGs have been central to the intervention areas and are perceived as vehicles to initiate and sustain change. Currently, there are 605 SHGs across five field offices through which 9455 members are participating in the savings and credit programme.



Other than inculcating the habit of regular savings and credit, the programme offers a scope for financial security. The access to credits helps the women to develop their confidence in dealing with situations and opportunities. One of the sources of earning of the group is from the interest earned from the loan given out to the members adding on to the saving amount of the individual members.

In this year, an amount of Rs. 8.85 lacs was mobilized through savings of the individual members. The SHGs earned over Rs. 5.5 lacs as interest and penalty income which has contributed towards corpus of the SHGs. The cumulative savings amount to Rs. 67 lacs, till date.



Internal Loans: The group further provides loan from the savings to the members to meet the small credit needs of the members. 269 SHGs availed internal lending. The total turnover was 35.5 lacs and the interest gained amounted to Rs. 5.5 lacs.

External Loans: Less than a fourth of the SHGs availed external loans. About 89.7lacs was availed as loans across the project areas, including the revolving fund of VIKSAT and UPNRM project loan. This year, no new linkage of the SHGs with bank loans was established. Turnover of the bank officials, lack of motivation amongst the bankers to engage with the disadvantaged communities, lack of sensitization amongst the banking staff has remained the prime reasons behind diminishing interest amongst the SHGs to take proactive step to develop linkages with the bank and mobilize loans. Collective decision making during the conduct of meetings, thrift and credit decisions are the processes makes the SHGs a responsible vehicle and a responsive system. Need based and timely financial services at the doorstep, high repayment, presence of peer support and peer pressure, low transaction costs, gradual preparation of the group towards micro-entrepreneurship are the unique features of the programme making it a potent and enabling tool for human development.

To make the system responsive to the needs of the people, minimize the room for human errors from creeping in the programme implementation, help people to seek the loans in the correct manner and ensure proper recovery of the loan amount,

Formation of new SHGs under NABARD Bank Linkage Programme

VIKSAT, with the support of NABARD is implementing a project to facilitate the formation of new SHGs to promote linkages with the banks in Patan and Sabarkantha districts. The main objective is to bring about economic empowerment of SHGs and providing them a platform for sharing experiences. The Project has helped in strengthening the NRM activities carried out by women for their livelihood and drudgery reduction. The various stages of the project include formation of new SHGs, opening of bank account, saving and credit, intra-loaning, grading of SHGs, bank credit linkages and capacity building of SHGs (leadership, decision making process, maintaining books & accounts, Networking, micro-enterprise etc.). As many as 136 new SHGs have been formed across three field offices (Radhanpur- 49, Bhiloda- 52, Kheroj- 35) implementing the project. Till 31st March 2013, 123 SHGs have opened bank A/Cs with SBI branches, out of which 40 SHGs are administering internal lending processes.

the loan administration process has been decentralized. The loans are provided to the members through the P.Is. The P.Is are the decision makers and ensure that selection of beneficiaries is

done in a scrupulous manner so that the loan received is used for the appropriate and rightful purpose. These ground level processes also ensure that the repayment of the loan amount does not become a burdensome process for the beneficiary.

Summary of training and capacity building activities under FASAL

In the year 2012-13, under the FASAL project of UPNRM, several trainings, meetings and capacity building programmes (68 in all) were undertaken for



the programme participants and programme staff, covering 2185 participants across the Field Offices of VIKSAT. A summary of the same is shown in the table below:

| Community Institution Building | Activities | | | | | No. of Participants | | | | |
|---|------------|-----------|-----------|-----------|-----------|---------------------|------------|------------|------------|-------------|
| | SL | BH | RH | BL | Total | SL | BH | RH | BL | Total |
| Awareness Meetings | 7 | 6 | 8 | 10 | 29 | 384 | 150 | 271 | 398 | 1203 |
| Exposure Visit | 1 | 0 | 3 | 3 | 7 | 19 | 0 | 77 | 47 | 143 |
| Technical Trainings | | 0 | | 2 | 2 | | 0 | | 68 | 68 |
| SHG Refresher Training (Basic) | 2 | 6 | 6 | 5 | 19 | 47 | 95 | 377 | 188 | 607 |
| Leadership training | | 4 | | 2 | 6 | | 56 | | 102 | 158 |
| Field staff meeting cum Training | | 2 | | 3 | 5 | | 2 | | 4 | 6 |
| Total | 2 | 18 | 20 | 25 | 68 | 133 | 303 | 569 | 807 | 2185 |
| VIKSAT Field Offices SL: Satlasana, BH: Bhuj, RH: Radhanpur, BL: Bhiloda. | | | | | | | | | | |

Farmers' Club

VIKSAT has facilitated the formation & strengthening of 75 Farmers' Clubs across the project areas in four district of the state, as shown in the table above. Out of a total membership of 2087 farmers, about 1/5th (351) are women farmers. VIKSAT strives to increase the participation of women farmers and empower them to reclaim their rights & recognition as farmers. Farmer clubs have been formed across all the field offices, except for Bhuj.

1. Khedbrahma & Satlasana Field office

In the field areas of Khedbrahma and Satlasana, the farmer clubs are institutions acting as vehicles of implementing the activities under the watershed

development, watershed plus or agriculture development work. In Khedbrahma, members of 25 F.Cs participated in the trainings imparted on watershed development, efficient water management practices, Soil and Water conservation measures, kitchen gardening, vegetable cultivation and livelihoods. In Satlasana, members from 26 F.Cs participated in technical trainings related to agriculture development such as conservation and breeding of medicinal plants and good agricultural practices of cumin, cotton and fennel. The F.Cs also participated in exposure visit to agricultural fairs and exhibitions and farms of progressive farmers for on - field trainings on scientific agricultural practices.

2. Radhanpur Field Office

| Details | Topic | Place | Date | Participation |
|----------------|--|---|----------------------|---------------|
| Training | IPM in Cumin | Manpura | 16 Jan 2013 | 40 |
| Scientific | Scientific cultivation of Cumin | Mandvi | 7 Nov 2012 | 45 |
| Interface | Scientific cultivation of Date palm & Pomegranate | Varahi | 25 July 2012 | 60 |
| Exposure visit | Improved Agriculture Practices - Cumin, Castor, Vegetables Fruit cultivation- Pomegranate, Date Palm under Drip Irrigation system Vermi compost Progressive Farmer's visit | KVK-Samoda, Ta:Sidhpur, Dist.Patan SOFILM- Palanpur | 29 Feb to 2 Mar 2013 | 29 |
| | Farm mechanization Post harvest technology Micro irrigation CAT Program | Agri. Tech Asia Exhibition 2012 Mahtama mandir, Gandhinagar | 6 Sep 2012 | 41 |
| Total | | | | 215 |

The PIASA (30 Viksahil Taluka Project) supported by Jilla Ayojan Bhavan- Patan, implemented plantation of pomegranate across 72 acres of land in Sami and Santalpur taluka of Patan district. In these talukas, crop demonstrations for Castor (GCH-4&7), Cumin (GC-4) and Organic cumin (GC-4 & local variety) were undertaken to disseminate information on three main components, viz., seed variety, inputs and process. In these activities, the farmers were not treated as end line beneficiaries but project participants facilitating their involvement right from planning stages to culmination of the project. While the project period has ended, yet the learning is taken ahead. Some farmers of the farmer clubs purchased the recommended quality input materials [seeds/fertilizers/pesticides] on their own or by seeking UPNRM project loan to get the economic return. Amongst those farmers who are cultivating pomegranate, some meet in groups and participate in trainings to get further knowledge about scientific cultivation practices of pomegranate.

3. Bhiloda Field Office

| Sr. No. | Topic | Place | Date | Participation |
|--------------|--|---|------------------------|---------------|
| 1 | Summer Vegetable Cultivation | Wagheshvari | 5 Jan 2013 | 60 |
| 2 | Exposure visit to learn about WADI, Watershed, Improved Agriculture | BAIF KVK-Chasvad, Bharuch, BAIF-Lachakadi | 29 Feb to 2 March 2013 | 5 |
| 3 | Exposure visit to understand vegetable cultivation using Drip Irrigation | Navsari Agriculture University, Hirabhai Patel's farm in Panol village, Vadali, Delvada, Khedbrahma | 13 Mar 2013 | 27 |
| Total | | | | 92 |

Exposure visits: To observe the horticultural and vermicomposting activities, nursery, cashew processing unit and to learn about the low cost green house etc., exposure visits were organized for the staff during 28 Feb-2 Mar 2013 to the Agriculture University, Chaswad and Lachhakdi farm.

Trainings for SHGs and F.Cs: Trainings were held for the SHG leaders on the roles and responsibilities of SHG and leadership development, record keeping and orientation about the farmers' clubs.

Trainings attended by staff under UPNRM:

| Sr. No. | Date | Subject | Organised by | Venue |
|---------|---------------------------------|--|---|---|
| 1 | 15 Oct 12 to 18 Oct 12 (4 days) | Programme on Managing SHGs using computers for SHPI NGOs | Bankers institute of Rural Development, Lucknow | National Institute of Cooperative management, Gandhinagar |
| 2 | 18 Dec 12 to 22 Dec 12 (4 days) | Programme on Credit Aspects in Rural Development | BIRD & NICM, Gandhinagar | National Institute of Cooperative management, Gandhinagar |

Demand Side Management and Renewable Energy

VIKSAT has been implementing a project on Demand Side Management (DSM) & Renewable Energy (RE) focusing on the Capacity Building of the civil society organizations in collaboration with the Consumer Unity & Trust Society (CUTS), Jaipur. The project is implemented with the support from The Climate Works Foundation, US which is represented by Shakti Sustainable Energy Foundation (SSEF) in India. During the project VIKSAT has undertaken a series of activities including perception change survey of the consumers, followed by intensive consumer



interaction programmes with rural and urban energy consumers across different sectors and capacity building programmes for the implementing partners. A final consumer survey was also undertaken to determine the level of awareness about energy conservation and related issues. Furthering the same, we organized a dissemination meeting to share the outcomes of the research study, gaps and challenges and further action component on the identified issues. The project continued over a period of 18 months in four districts of Gujarat, namely Mehsana, Ahmedabad, Patan and Kutchh, through a network of eight partnering and implementing NGOs.

To share the outcome of the project, analyze and discuss the role of policies and regulations in promoting clean energy sources, a state level dissemination meeting was organized at VIKSAT on 29th of January 2013, in collaboration with GERC. More than 50 participants attended the meeting including representatives from diverse fields for e.g., state agency for energy development (GEDA), utilities (UGVCL), institutions providing credit services in agriculture and rural non farm sector (NABARD), industrial sector (NEPL),

academic, research and management institutions (GERMI, NIRMA University and PDPU from Gandhinagar, CEPT and VASCSC from Ahmedabad and JNU, Delhi), CSOs in and around Ahmedabad, commercial agencies promoting EE equipments (HERA Energy solutions, Ahmedabad) and media. The perception research study with the consumers revealed the following:

- Consumers are ready to pay a little extra for good quality electricity
- There is an increase in awareness about renewable energy technology and energy efficient products and energy audits
- People are gradually getting aware about the regulatory commission & their role as a consumer
- High initial cost and lack of credibility of the products are the chief barriers in RET and EE promotion
- There is increasing awareness about the scope and role of CSOs in promotion of RET and EE

Issues like gaps in policy and practice, consumer awareness and participation in the DSM programmes, availability of platforms to redress the consumers' concerns, market efficiency, standardization of RE products, were identified and discussed in the meeting.



VIKSAT.... a learning bay

To experiment with the classroom theories and learn from the people working at the grass roots' level, every year, educational institutions arrange for field educational trips for their students to VIKSAT. Apart from getting an opportunity to share the experiences and best practices, VIKSAT also takes this as an opportunity to build the future professionals, build them as the agents of ushering in and sustaining change and even to look at its activities critically. This year, VIKSAT received

students from a wide range of institutions, to understand the land water management programmes of VIKSAT in Kheroj. Students from other educational institutes like PDPU, Gandhinagar and Gujarat Vidyapith, Ahmedabad also completed their placement period in VIKSAT. The students of PDPU undertook a study on 'Efficiency of agricultural pumps' with 50 farmers of Mehesana district, in collaboration with UGVCL Ltd.

11 young development professionals from Reliance Foundation, Mumbai (Maharashtra) participated in rural internship programme in three batches over a period of 10 days at VIKSAT. During their stay, the students visited the field offices, met with the communities, the P.I representatives, the grassroots level staff and other stakeholders to understand the activities implemented by VIKSAT. The rural stay culminated into a experience sharing session with the VIKSAT official at the H.O wherein

the interns presented individually and in groups, their experiences, observations and views generated over the period of interaction and association. VIKSAT was also invited to address the students of MBA on the topic: Managing Social Projects, in the Institute of Management, Nirma University on 15th February 2012 and on 27th September 2013.

VIKSAT Library and Resource Center

VIKSAT Resource Center supported by SDTT is now functional and being used for library and conducting various trainings, seminars, meetings etc. The library has a rich collection of over 3500 books and audio-visuals, along with a computerised database in its library. The huge space, optimum facilities of the resource center in combination with peaceful and scenic natural setting of the campus and easy accessibility adds to the uniqueness of the resource center as a training venue.

Training programmes and exposure visits conducted at VIKSAT

| Sr. No. | Date | Participating organizations | No. of Participants |
|--------------|------------------|---|---------------------|
| 1 | 21 - 30 Nov 2012 | Rural exposure visit for young development professionals of Reliance Foundation, Mumbai (Maharashtra) | 3 |
| 2 | 12 - 21 Dec 2012 | | 4 |
| 3 | 06 -14 Jan 2013 | | 4 |
| 4 | 04 Mar 2013 | MSW students, Goutham College of Science, Bangalore, Karnataka, | 20 |
| 5 | 28 Nov 2012 | MAVIM, Maharashtra | 6 |
| Total | | | 37 |

Details of the educational tours to the field offices during exposure visit at Field Office at Kheroj

| Sr. No. | Date | Name of the agencies visiting VIKSAT | No. of Participants |
|--------------|-------------|---|---------------------|
| 1 | 30 Aug 2012 | NABARD officers and NGO representative of six states of India | 30 |
| 2 | 01 Nov 2012 | DSC, Visnagar(Gujarat) | 72 |
| 3 | 27 Nov 2012 | DSC, Visnagar(Gujarat) | 40 |
| 4 | 05 Dec 2013 | DSC, Modassa (Gujarat) | 34 |
| 5 | 30 Jan 2013 | DWDU, Rajkot (Gujarat) | 27 |
| Total | | | 203 |

Some encouraging words...

The working area of the organization is really challenging and VIKSAT is doing good job for upliftment of tribal people and reaching those areas where nobody wants to go. The participation by women members in the activities was appreciable. The livelihood activities are good but should be upscaled.

Ms. Rohini Kumari, Trainee Staff, Reliance Foundation

Result is visible through capacity building, participation and transparent implementation

Team members, DWDU, Rajkot (Gujarat)

Good work by staff through farmer's participation. Good benefit to farmers by watershed development works. Good project of NABARD to improve life quality of poor people.

Team Leader, DSC, Visnagar (Gujarat)

VIKSAT extends its thanks to all the institutions and individuals who have contributed to and worked with us in development action. We are grateful to the government departments, funding agencies, donors, our NGO and CBO partners for having stayed with us and supporting our efforts. We acknowledge their significant support during the year 2012-13 and hope for their continued cooperation in the coming years. Some of the partners, with whom we have been working, are as follows:

Major Funding Partners

- National Bank for Agriculture and Rural Development (NABARD)
- Ford Foundation
- Collectives for Integrated Livelihood Initiatives (CINI)
- Sir Ratan Tata Trust (SRTT)
- Sir Dorabji Tata Trust (SDTT)
- Ministry of Environment and Forests (MoEF), GOI
- District Planning Office (DPO), Patan
- John Deere Foundation (JDF)
- John Deere Water (JDW)
- United Way of Mumbai (UWM)
- United National Development Program (UNDP)
- Indian Council of Agricultural Research (ICAR)
- Gujarat Institute of Desert Ecology (GUIDE)
- Gujarat Forest Department (GFD)
- Gujarat Biodiversity Board (GBB)
- Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ)
- Consumer Unity & Trust Society, Jaipur (CUTS)
- KFW- IGWDP (Indo German Watershed Development Programme)
- Global Environment Facility -Small Grant Programmes (GEF-SGP)
- National Council for Science and Technology Communication (NCSTC)
- Department of Science and Technology, (DST), GOI

Activity Partners

- DRDA, Banaskantha
- DRDA, Mehsana
- DRDA, Sabarkantha
- DRDA, Kachchh
- Center for Environment Education (CEE)
- Vikram A. Sarabhai Community Science Centre (VASCSC)
- Kachchh Heritage, Art, Music, Information and Resources (KHAMIR)
- Society for Promotion of Wastelands Development (SPWD)
- Paryavaran Edutech
- KVK, Khedbrahma
- Kutch Nav Nirman Abhiyan (KNNA)
- Sardarkrushinagar Dantiwada Agricultural University (SDAU)
- Sustainable Rural Enterprise (SURE)
- Aravali Agriculture Resource and Training Center (AART)
- AFC, Mumbai
- WES-Net India

Our Bankers

- State Bank of India
- Dena Bank
- Indian Overseas Bank
- Bank of India

Abridged Balance Sheet

(Rs. In Lakhs)

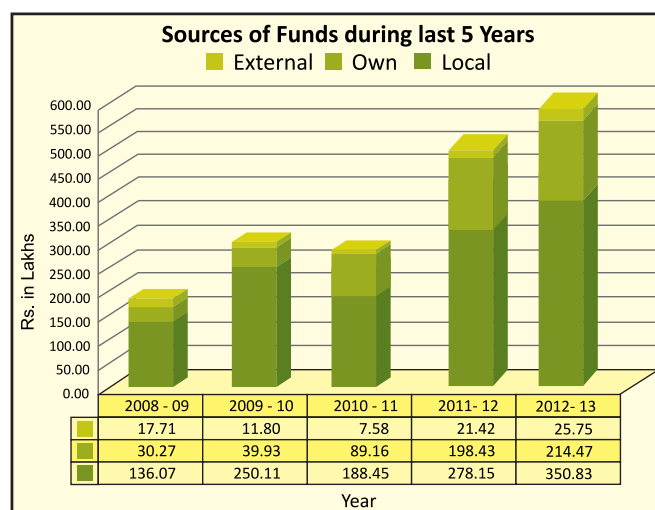
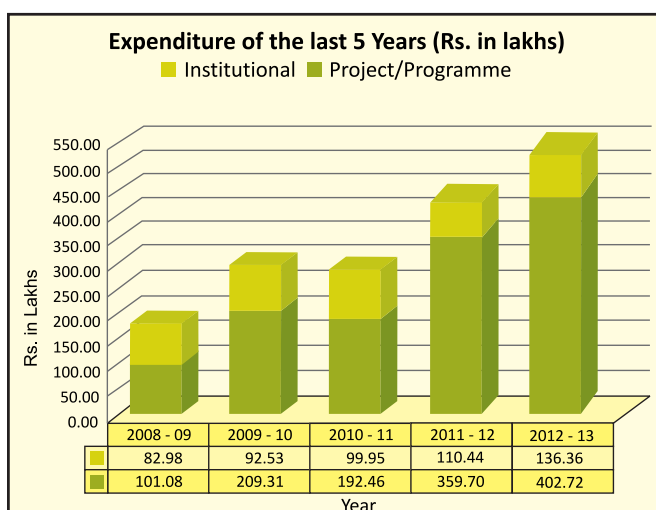
| Funds & Liabilities | 31 March 2012 | 31 March 2013 |
|--|---------------|---------------|
| Endowment Fund Account | 80.00 | 80.00 |
| Reserves & Other Earmarked Funds | 602.92 | 670.08 |
| (Inclusive of accumulated surplus/deficit) | | |
| Balance of Project Grants | 77.60 | 120.83 |
| Sundries & Suppliers | 44.89 | 42.05 |
| Total | 805.41 | 912.96 |

| Assets | 31 March 2012 | 31 March 2013 |
|------------------------------------|---------------|---------------|
| Immovable and Movable Properties | 194.90 | 197.24 |
| Investments in Approved Securities | 269.00 | 269.00 |
| Bank Account and Cash/Fdrs etc. | 121.32 | 137.44 |
| Advances and Other | 220.19 | 309.28 |
| Total | 805.41 | 912.96 |

Abridged Income and Expenditure Account

| Income | 31 March 2012 | 31 March 2013 |
|--------------------------------|---------------|---------------|
| Projects and Programmes Income | 223.75 | 213.85 |
| Income from Other Sources | 110.44 | 122.76 |
| Loan receipt | 135.95 | 202.47 |
| Total | 470.14 | 539.08 |

| Expenditure | 31 March 2012 | 31 March 2013 |
|--|---------------|---------------|
| Projects and Programmes Expenditure | 226.10 | 198.30 |
| Staff Salaries | 103.61 | 117.58 |
| Establishment and Administrative Expenditure | 17.17 | 30.68 |
| Amount transferred to Other Earmarked Fund | 2.59 | 2.23 |
| Loan disbursement | 135.95 | 202.47 |
| Total | 485.42 | 551.26 |
| Surplus/(Deficit) | -15.28 | -12.18 |
| Total | 470.14 | 539.08 |



VIKSAT Council of Management

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Prof. M S Swaminathan
Chairman, M S Swaminathan Research Foundation
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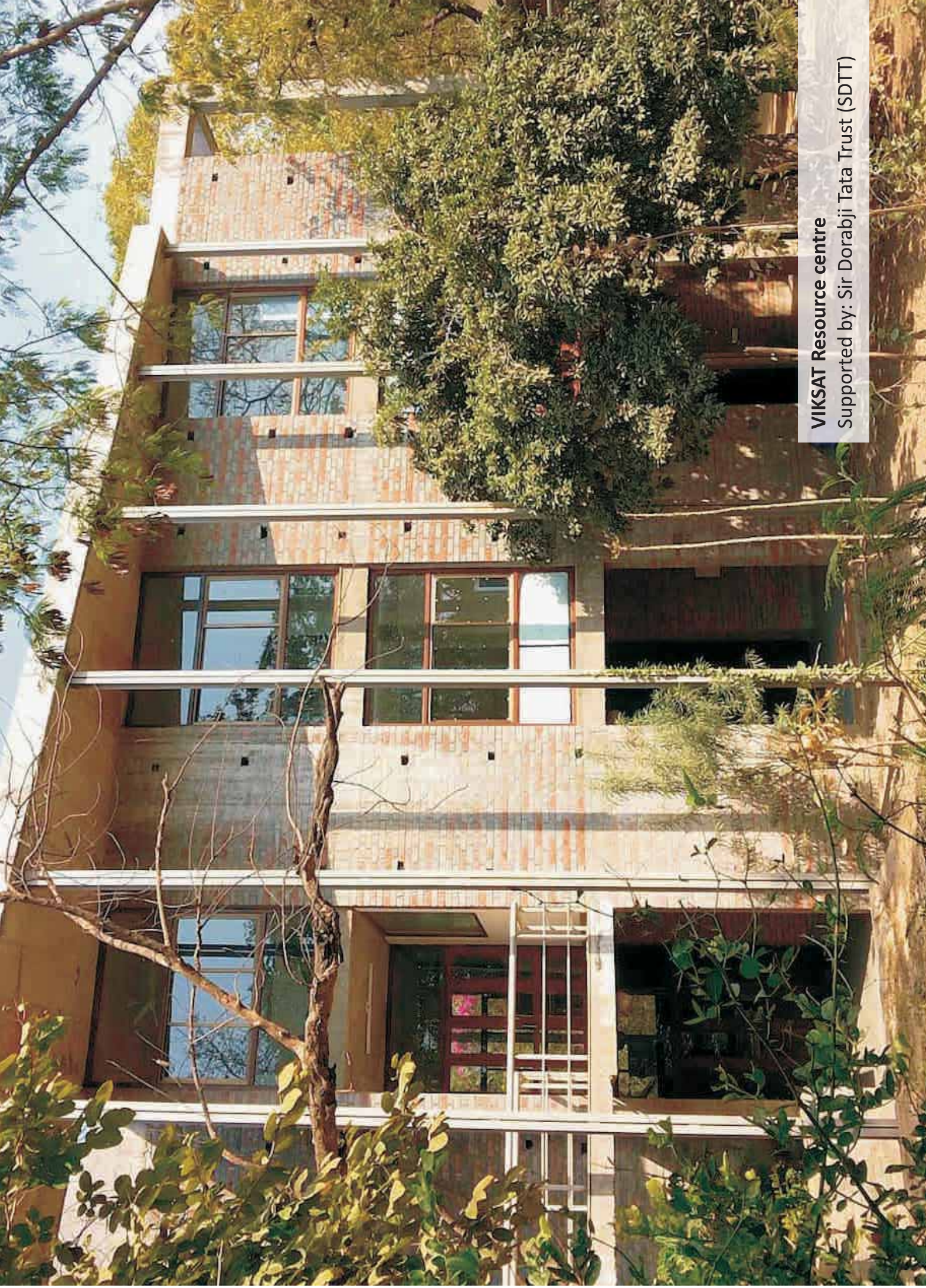
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VIKSAT Resource centre

Supported by: Sir Dorabji Tata Trust (SDTT)



www.viksat.org



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