Annual Report
2016-17

An Initiative of **TATA TRUSTS**

REVIVING GREEN REVOLUTION CELL

(Associate Organization of TATA TRUSTS)

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GOVERNING BODY

Chairperson	:	**Dr. B.S. Dhillon,** Vice Chancellor, Punjab Agricultural University, Ludhiana
Member	:	**Dr. G.S. Kalkat** Chairman Punjab State Farmers Commission
Member	:	**Dr. K. Ramasamy** Vice Chancellor, Tamil Nadu Agricultural University, Coimbatore
Member	:	**Dr. Jasbir Singh Bains** Director of Agriculture, Punjab
Member	:	**Dr. R.S. Sidhu** Director of Extension Education, Punjab Agricultural University, Ludhiana
Member	:	**Mr. Burzis S. Taraporevala** Secretary & Chief Financial Officer, Tata Trusts, Mumbai
Member	:	**Mr. Arun Pandhi** Program Director-Implementation, Tata Trusts, Mumbai
Treasurer	:	**Dr. A.S. Dhatt** Senior Advisor- Agriculture, Tata Trusts, Mumbai
Member	:	**Dr. D.S. Brar** Honorary Adjunct Professor, School of Agricultural Biotechnology, Punjab Agricultural University, Ludhiana
Member	:	**S. Avtar Singh Dhindsa** Progressive Farmer
Secretary	:	**Dr. G.S. Chahal** Executive Director, Reviving Green Revolution Cell

PREFACE

No doubt the adoption of high yielding varieties of wheat and rice along with improved production technology in Punjab wiped out food shortage in the country but a large scale adoption of Rice-Wheat Cropping System since then has become a serious cause of fast deteriorating soil health and depletion of water resources. It thus became inevitable to divert substantial area under these crops to other less water requiring crops like cotton, maize, pulses, oilseeds etc. for sustaining the production potential of Punjab soils. But all efforts to diversity agriculture failed to reverse this status of agriculture in Punjab. It was at this stage that Tata Trusts, Mumbai started the initiative on "Reviving the Green Revolution" through financial support to Punjab Agricultural University during 2002-2005 and then through Department of Agriculture, Punjab in Phase-II from 2005-2008. The Trusts established a centralized body in the form of Reviving Green Revolution Cell in 2008 for an active participation of Trusts for the betterment of agriculture and farming community of Punjab. The operation of projects especially on IPM in Cotton and Basmati has been so successfully that a Regional Center of the RGR Cell has been established at TNAU Campus, Coimbatore to replicate the success stories of Punjab to other states of Southern and Central India. Agencies like WWF-India have also joined hands with RGR Cell for further supporting cultivation of Better Cotton with reduced input use and optimum resources utilization.

The RGR Cell directly operates most of the projects like Integrated Productivity Management on Cotton-Wheat and Basmati based Cropping Systems, Nutrition gardening and linkage of farmers with market in Punjab. The RGR Cell has now undertaken a new initiative on mobile based agro-advisory for long term sustainability and impact of Trusts' supported initiative. During the current phase, the RGR Cell is to lay main emphasis on finalization of workable model of mKRISHI for large scale adoption for transfer of technology in agriculture. All other Trusts' supported projects in other agricultural institutes and organization in Punjab and Tamil Nadu are also executed through RGR Cell with a responsibility of regular field visits and review of ongoing projects. In addition, the RGR Cell provides technical support to other agriculture based interventions under other associated organizations of the Trusts. This Annual Report of the RGR Cell is compilation of all such activities undertaken by the RGR Cell (Punjab) during 2016-17. The technical support provided by Mr. Baljinder Singh Saini, Assistant Development Manager (RGR) and Ms. Khorshed Talati, Sr. Development Officer (RGR) in preparation of this report is highly appreciated. I owe my personal gratitude to Dr. A.S. Dhatt, Senior Advisor-Agriculture, Tata Trusts; Dr. A.S. Sohi, Advisor Agriculture; all Consultants; Agriculture Development Officers; Field Officers and Grant Manager for gainful utilization of the grants and for providing the technical input for the preparation of this report. A special mention needs to be made of generous cooperation and support of Director of Agriculture, Government of Punjab, for all the financial and operation support in the implementation of the projects. The financial support of Tata Trusts for functioning of the RGR Cell is acknowledged with great sense of gratitude.

G.S. Chahal
Executive Director

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Reviving the Green Revolution (RGR) Initiative

The advent of Green Revolution during 1970s resulted in a phenomenal increase in agricultural production that made India food sufficient. Punjab alone witnessed an eight-fold increase in food production from 30 lakh tons in 1961 to 2.53 crore tons by 2000. The technologies that accompanied the Green Revolution, however, led to excessive use of agrochemicals and overexploitation of subsurface water, especially for cultivation of rice, which made agricultural production of Punjab unsustainable and grossly uneconomical. The State Government constituted the Johl Committee in 1985, under the Chairmanship of noted economist Dr. S. S. Johl to provide solutions. The report suggested the replacement of at least 150,000 hectares under paddy to lesser water intensive crops such as Basmati, Cotton, Maize, Vegetables, etc. However, due to lack of political will, these were never implemented on a scale which could fulfill the purpose of setting up the Committee. This notwithstanding, some alternative crops could be adopted with assurance of their economic viability, provided it was well demonstrated to farmers. The most viable alternative for diversification in agriculture was to divert area under paddy cultivation to Cotton. However, the scourge of pests reared its ugly head and recurrent attacks resulted in heavy crop loss, low yields and even failure of Cotton crop. The farmers countered this through a two to threefold increase in number of pesticide sprays that not only resulted in increase in pesticide residue and environmental damage, but also increased cost of production with very low economic returns.

Amidst this bleak scenario, the Trusts operationalised its 'Reviving the Green Revolution (RGR)' initiative in Punjab in 2002, to seek solutions to arrest the stagnation in agriculture in Punjab that had set, due to the above said reasons. It is aimed at bringing diversification in agriculture by shifting some area from predominant cropping system of paddy-wheat cultivation to popularize less water consuming crops as an economically viable alternative to paddy; reduction in cost of production; value addition to crops to increase profitability from farming; conservation of natural resources especially soil health and sub-surface ground water; and protecting the environment from pesticides and pollution caused by crop residue burning.

The financial support of the Trusts (2002-15) to Punjab Agricultural University, Ludhiana; Department of Agriculture, Government of Punjab; and the RGR Cell to promote "Diversification" led to standardization and adoption of Integrated Pest Management (IPM) systems has further enhanced the income of the project farmers to Rs. 281,192 and Rs. 440,000 under two Cropping Systems, respectively. The successful operation of these interventions under Cropping Systems approach has been demonstrated in four Clusters of 100 villages each under Cotton-Wheat and Basmati based cropping systems.

technology in Cotton and Basmati rice for profitable cultivation of these crops, in place of rice. Large scale demonstration of IPM has led to increase in income from Rs. 46,000 to Rs. 173,000 per household for Cotton and from Rs. 150,000 to Rs. 300,000 for Basmati. Since the entire Cotton and Basmati growing areas of Punjab are sown under Wheat crop during the Rabi season, the extension of the Integrated Productivity Management Approach in Cotton-Wheat and Basmati-Wheat based cropping systems has further enhanced the income of the project farmers to Rs. 281,192 and Rs. 440,000 under two Cropping Systems, respectively. The successful operation of these interventions under Cropping

[1]Tata Trusts
[2]The Reviving Green Revolution (RGR) Cell is a Registered Society under the Societies Act.

Systems approach has been demonstrated in four Clusters of 100 villages each under Cotton-Wheat and Basmati based cropping systems.

Since the beginning of the initiative in 2002, it has resulted in adoption of 1,200 Cotton-growing villages for demonstration of Cotton IPM technology at village level and leading to mass scale impact. One educated youth from each adopted village was trained and deployed as a Scout for providing readily available agro-advisory during, as well as after completion of projects. Similarly 150 villages (across the Basmati belt in Punjab) were adopted each year (2009-12) for popularization of IPM in Basmati. Village level demonstrations were conducted to popularize cultivation of Groundnut, Moong, Maize, and Vegetables. Five Self Help Groups (SHGs) of farmers were established, which now are registered as Producer Companies, for adequate and profitable marketing (which was the main hurdle in the adoption of these crops). A total of 5,00 Nutrition Gardens were also established for year round availability of home grown vegetables for enhanced consumption and nutrition of each family.

Impact created through the initiative

- Cultivation of Cotton was revived and annual production increased to over 20 lakh bales (compared to 10.8 lakh bales at the start of the project), which generated additional annual revenue worth Rs. 750 crore to the economy of the State.
- An effective pest control was achieved even with 40-45% reduction in use of pesticides, giving an additional income of Rs. 11,500/ per ha, with an additional income of Rs. 57.50 crores from an area of 50,000 hectares, covered each year under the project.
- Additional employment worth Rs. 75 crores per annum was generated for picking of Cotton for women of landless families.
- Adoption of the new Clustering Approach amidst clusters of 100 contiguous villages for the entire Cotton-Wheat cropping system provided an additional income of Rs. 2.3 lakhs per household over the baseline income.
- The Basmati IPM project provided an additional income of Rs. 17,000 per hectare over an area of 50,000 hectares under Basmati with additional annual income of Rs. 85 crores to the Basmati growing farmers in project areas.
- Cleaner environment due to reduced use of pesticides under IPM led to an increase in honey bee colonies from 9,700 to 30,000 and consequent increase in honey production from 1,780 tons to 14,000 tons during this period.
- The Indian Cotton Textile Industry honored the Trusts with a Special Award at the Indian Cotton Conference during November 2013 for their contribution towards enhancing social welfare of Cotton farmers.
- Each Nutrition Garden provided, on an average, 300 kilograms of vegetables, thereby leading to savings of Rs. 7,300 per household per year – an amount which each family would have otherwise spent for purchasing vegetables from the market.

Besides the direct impact, the initiative was successful in creating indirect impact with the Trusts' Associate Organizations through conducted field visits in implementation of agriculture-related projects as well as review and substantial improvement in the quality of finalized Annual Work Plans through provision of technical inputs.

REVIVING GREEN REVOLUTION CELL

The Cell, established in 2008, is now a registered body housed in PAU with formal institutional structure and is responsible for prioritization of thrust areas of funding by the Trusts in the country, besides monitoring progress of ongoing projects. The most critical gaps limiting income from commonly used agricultural practices of a particular area are identified where suitable interventions have an obvious scope for noticeable enhancement in livelihood of small and marginal farmers. The most appropriate agricultural interventions are then identified and validated through the concerned local Agricultural Research Institute like PAU (Punjab Agricultural University) in Punjab and TNAU in Coimbatore. The further large scale popularization of such technologies is then taken up in collaboration with State Departments of Agriculture (DoA), Directorate of Horticulture (DoH), other partner Organisations of the Trusts such as PAU and other agencies such as WWF, India. All such activities are undertaken under the technical guidance and supervision of the RGR Cell as Nodal Agency.

Key Objectives/Mandate of RGR Cell

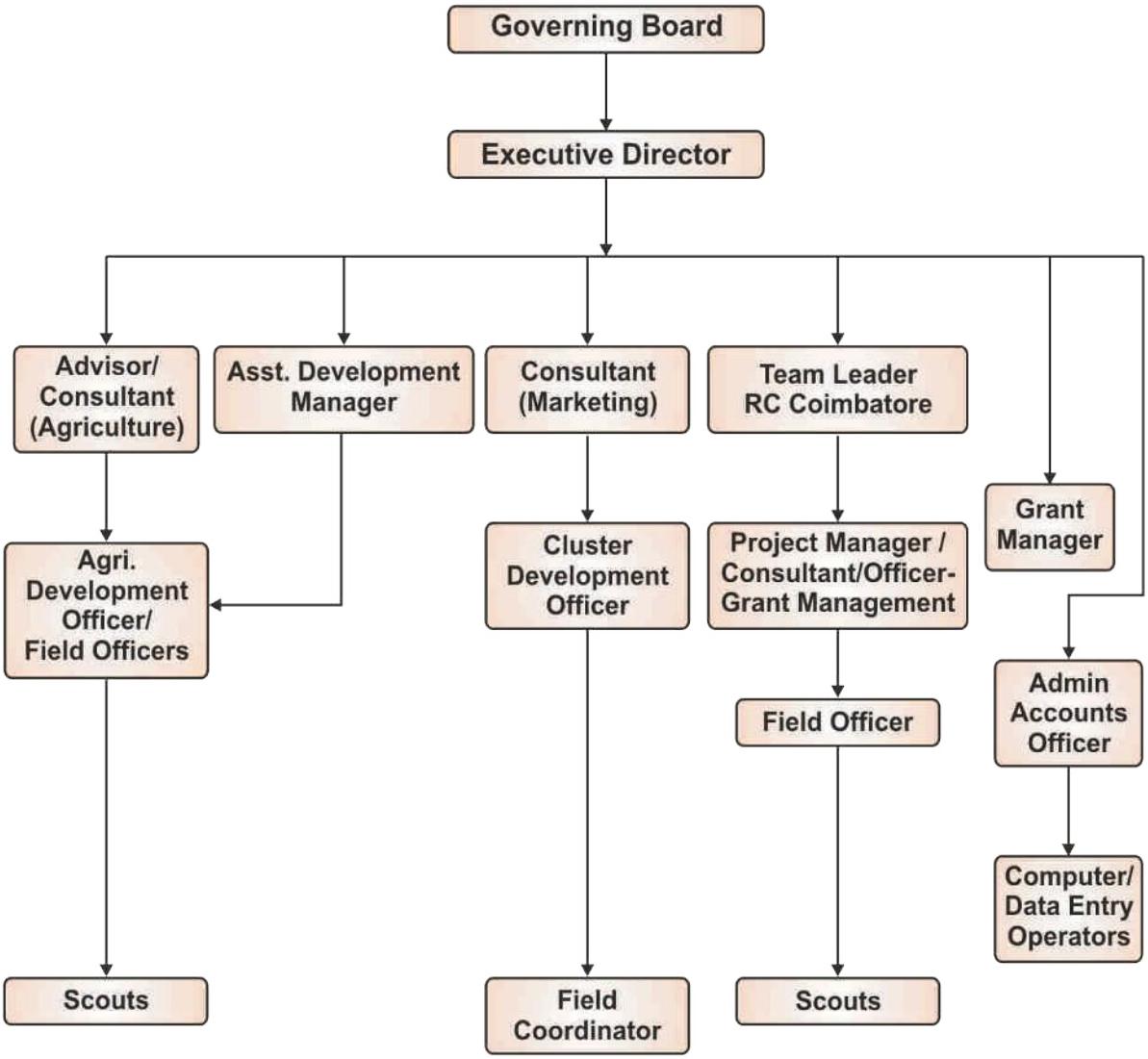
- Support large scale activities for adoption of technologies by the farmers in prime areas of concern in agriculture
- Support development departments of state governments and the private sector in frontline extension activities for increasing agricultural productivity and augmenting economy of farmers
- Support activities that build market linkages of farmers, growth of subsidiaries and encourage agro-based entrepreneurship
- Support researchable issues in agricultural universities to fill in the gaps of agricultural technologies developed. Cell is now responsible for prioritization of thrust areas of funding in PAU and TNAU, besides monitoring progress of ongoing projects. Besides implementing key projects on promoting crop diversification, the Cell also act as an idea incubator for developing potential sustainable agriculture technologies.

Organizational Set-up

The RGR Cell, Ludhiana is headed by Executive Director (ED) and supported by Assistant Development Manager (RGR) from the Trusts. The Cell's annual budget during 2016-17 was around Rs 4.45 million, which included the budget for the fully functional Regional Centre (RC) established in 2010 at TNAU, Coimbatore to provide impetus to RGR Initiative in Tamil Nadu. This budget is excluding that on projects being implemented by RGR Cell. The ED also functions as the Secretary of the Governing Body of RGR Society. With respect to the RGR programme, the ED, reports to the Program Director, Tata Trusts and the Governing Body of the RGR Cell. The total staff in RGR (Punjab) at present is twenty five, including a Senior Advisor Agriculture, an Advisor-Agriculture, four Consultants, five Agriculture Development Officers, one Cluster Development Officer, six Field Officers, one Grant Manager, one Assistant Accountant, three Computer/data entry Operators. The Regional Centre, RGR Cell in Coimbatore, Tamil Nadu is supervised by Team Leader, RGR Regional Centre under the guidance of Executive Director, RGR Cell.

The total staff in RGR (Tamil Nadu) at present is six, including One Project Manager, One Consultant, two Field Officers, One Officer-Grant management, and Data Entry Operator based in Coimbatore.

The Hierarchical HR Structure of Reviving Green Revolution Cell is as follows:



Sr. No.	Name	Designation
Punjab Team		
1	Dr. G.S. Chahal	Executive Director
2	Dr. A.S. Dhatt	Sr. Advisor - Agriculture
3	Dr. A.S. Sohi	Advisor - Agriculture
4	Dr. I.M. Chhibba	Consultant - Agriculture
5	Dr. G.S. Deol	Consultant - Agriculture
6	Dr. R.S. Sahota	Consultant - Dairy
7	Ms. Navriti Gill	Consultant - Marketing
8	Mr. Baljinder Singh Saini	Asstt. Development Manager
9	Gurpreet Singh Walia	Agri. Development Officer
10	Kulbir Singh Brar	Agri. Development Officer
11	Harmandeep Singh Sran	Agri. Development Officer
12	Tam Lal Pokharel	Grant Manager
13	Manraj Singh Brar	Field Officer
14	Gurlal Singh	Field Officer
15	Kanwaljeet Singh	Agri. Development Officer
16	Inderjeet Singh Boparai	Field Officer

Sr. No.	Name	Designation
17	Harjeet Singh	Field Officer
18	Ashu	Field Officer
19	Baljinder Singh	Field Officer
20	Amandeep Singh Sharma	Cluster Dev Officer
21	Ravinder Singla	Office Assistant
22	Kuldeep Kumar	Computer Operator
23	Kamaljit Kaur	Computer Operator
24	Manisha Rawat	Data Entry Opeartor
25	Mr. Ratan Singh	Consultant
Regional Center Tamil Nadu		
1	Ms. Khorshed Talati	Team Leader
2	Dr. K. Natarajn	Consultant - Agriculture
3	Mr. Soman Raj S	Officer - Grant Management
4	Arul Pathinathan	Project Manager
5	P Murugesan	Field Officer
6	T. Viswanathan	Field Officer
7	V Jayasree	Computer Operator

Board Meetings

Reviving Green Revolution Cell held its 20th & 21st Governing Body Meeting on October 10, 2016 and February 27, 2017, while the 9th & 10th Annual General Body Meeting of the Society was held on October 10, 2016 and February 27, 2017.

RGR cell partners

RGR Cell has established a wide strategic support division, which includes various partners viz. Departments in Punjab Agricultural University (PAU), Ludhiana; Department of Agriculture (DoA), Government of Punjab, Chandigarh and Government of Tamil Nadu, Chennai; Directorate of Horticulture (DoH), Punjab; World Wide Fund for Nature (WWF), New Delhi and Tamil Nadu Agricultural University (TNAU), Coimbatore. The Cell is headquartered in Ludhiana and setup its Regional Centre in Coimbatore, Tamil Nadu in October 2010.

Key Areas of Interventions:

- Dissemination of farm adoptable model of technologies for small and marginal farmers for improving their livelihood in Punjab and Tamil Nadu.
- Dissemination of Integrated Productivity Management technologies for Cotton, basmati, vegetables and other alternate crops to achieve targets set out in RGR initiative for diversification of agriculture to save land and water resources as well as improve human health and environment.
- Facilitation of marketing of alternate crops for sustaining the diversification process and improving the economy of small and marginal farmers.
- Expansion of RGR initiative to replicate the success stories under RGR initiative.
- Cropping System instead of Crop based interventions

Operational Areas / Mode of Operation of the RGR Cell

1. Idea Incubation: RGR Cell sanctioned one SGP to Department of Soil Science, PAU on standardization of Leaf Color Chart based Nitrogen application in Direst Seeded Rice with an objective to determine the dose of nitrogen required under DSR conditions.
2. Nodal agency for projects implementation: RGR Cell directly implemented projects on Integrated Productivity Management of Cotton-Wheat Cropping System; Better Cotton Initiative project; Basmati based Cropping System project; Nutrition gardening; Marketing project directly through its own field staff in collaboration with DoA, Government of Punjab. In 2016-17, the RGR Cell, which functions as an idea incubation unit for the Trusts, initiated implementation of mKRISHI® - a mobile-based agro-advisory service aimed at covering 250,000 households across Punjab and Tamil Nadu. The integration of Information Technology in agriculture aims at bringing about sustainability of agricultural interventions, by ensuring that farmers continue to receive latest University recommended techno-advisory and don't have to depend on local agri-input dealers for information.

State	No. of villages	No. of HHs
Punjab	1,300	219,000
Tamil Nadu	108	2,332
Total	**1,408**	**221,332**

Kisan Mela stall put up by RGR Cell in Ludhiana September, 2016

3. **Monitoring/Review of the Projects:** Besides supervising its own field projects, the RGR team is also actively involved in monitoring of Trusts' projects to Tata Trusts associate organisations besides its Regional Center run projects in Tamil Nadu. The Team conducts regular project reviews and provided recommendations for improvement in projects. The Action Taken Report is also shared by RGR team for follow-up.
4. **Evaluation of the Impact of the action taken:** Under each sub theme of the RGR initiative, the professional teams are involved in project implementation, monitoring the progress, providing technical inputs and collating the output and impact to meet the targets. The teams are closely involved in generating data on the interventions and simultaneously the Impact Assessment Studies by independent expert(s) and Third Party Monitoring and Evaluation (M&E) are also undertaken.
5. **Audits of the funds received:** A complete financial record is maintained by RGR and is regularly audited as well. The RGR Cell has also internal auditor deputed by Tata Trusts.
6. **MoUs with partner organizations:** The RGR Cell signed Memorandum of Understanding with WWF, India on May 31, 2016.

Operational Strategy

The most appropriate agricultural interventions are identified and validated through the concerned local Agricultural Research Institute like PAU (Punjab Agricultural University) in Punjab & the TNAU (Tamil Nadu Agricultural University) in Tamil Nadu. The further large scale popularization of such technologies is then taken up in collaboration with State Departments of Agriculture and through other partner Organisations of the Trusts. All such activities are undertaken under the technical guidance and supervision of the RGR Cell as Nodal Agency. Regular monitoring of operations and even a periodic field review is conducted to assess the impact and mid-term modifications, if so required.

Reviving Green Revolution Initiative (Punjab)

Programme Goals & Objectives for 2015-17

Entire Cotton and Basmati growing area of Punjab is sown with a succeeding second crop (Wheat). The extension of IPM approach to cover the entire Cotton and Basmati based cropping system further enhanced the income of such farmers to Rs. 281,192 for Cotton-Wheat and Rs. 440,000 for Basmati based systems. The successful operation of these interventions for Cotton and Basmati crops singly, and to a small extent for these crop-based cropping systems, has been well demonstrated in clusters of 25 villages, each spread over 150 to 200 villages. This further needs to be extended to larger area covering the crop cycle for ensuring noticeable diversification in agriculture of Punjab.

Basmati and Cotton which have been promoted on larger area for crop diversification are relatively less prone to market uncertainties, all the other possible alternatives of paddy need some kind of marketing intervention to make them economically competitive with the prevailing assured and remunerative system of marketing for rice. Consequently, the Producer Companies (PC) have been nurtured for ensuring profitable price recovery and ensuring adequate market clearance for all crops which do not fall under the Minimum Support Policy. These PCs, however, need to be further strengthened for coverage of the larger farming community and the scale of business. Greater involvement of viable Farmer Producer Organizations (FPO)/ PCs and / or established Co-operative Societies are necessary to upscale and saturate the entire Cotton and Basmati growing areas for noticeable diversification in agriculture of Punjab and ensuring sustainability of project interventions.

The RGR Cell, while operating the above projects, brought out noticeable technical and operational gaps in the execution of other Trusts' funded larger projects, including agricultural activities, as a part of their project designs. The quality of outputs and the impact on income of farmers in most of these projects, with guarantees, especially those with the non-profit sector suffers for want of technical expertise and trained human resources in agriculture. The team of agricultural experts at the RGR Cell can provide technical support to all the Trusts' funded projects, involving agriculture-based livelihoods. There is also an urgent need to prioritize region-specific critical agricultural problems along with the most appropriate solutions, in order to plan need-based interventions with suitable human and financial resources.

The project is aimed at:

1. Saturating the project area with Integrated Productivity Management for agricultural production and profitable marketing in Punjab;
2. State level Producer Company providing agricultural services to farmers in RGR geographies post RGR exit

Coverage Target

The project on "Integrated Productivity Management for Upscaling the Cropping Systems" approach targeted to cover 320,000 households across 1,500 villages in 9 districts in Cotton and Basmati growing areas in Punjab as given below. Detailed list of Blocks is given as Annexure-I.

Theme	Districts	Collaborating institutes	No of Villages Covered	No of HHs covered	Area covered (Ha)
Cotton-Wheat Cropping System	Bathinda, Mansa, Muktsar, Fazilka, Faridkot, Sangrur	Tata Trusts; Dept. of Agriculture (GoP); PAU; BCI; WWF	900	235,000	500,000
Basmati based Cropping System	Amritsar, Gurdaspur & Tarn Taran	Tata Trusts; Dept. of Agriculture (GoP); PAU	600	80,000	120,000
RGR Cell (Punjab) - Market Linkages#	Mansa, Sangrur, Hoshiarpur and Amritsar	Tata Trusts; ATMA	5	5,000	--
RGR Cell (Punjab) - Knowledge Resource Center	RGR Cell	Tata Trusts			

Project villages from ongoing districts

Intended Outcome / Impact

S. No	Indicators	Target (year wise*)		
		Current 2014-15	2015-17	Achievement as on March 31, 2017
1	**Outreach**			
1.1	Total number of Villages covered	305	1,500	1,300
1.2	No. of Household	50,075	320,000	225,097
1.3	No. of Districts	7	9	9
1.4	Area covered (Ha) under Cotton-Wheat, Basmati based Cropping System and Marketing project	98,965	620,000	720,610
2	**Impact**			
2.1	Annual Gross Income (Rs. / HH)	281,000 (Cotton-Wheat) 440,000 (Basmati based Cropping System) 48,000 (Marketing)	354,000 (Cotton-Wheat) 539,000 (Basmati based Cropping System) 109,000 (Marketing)	205,937 (Cotton-Wheat) 197,450 (Basmati based Cropping System) 58,000 (Marketing)
2.2	Reduction in agrochemicals use (%)	40	40-45	18.5% in Cotton-Wheat and 95% in Basmati-Wheat (More pesticides application in cotton shrinked the % reduction)

*Annual Crop cycle April to March (*Kharif* & *Rabi* season crops)

PROGRESS OF RGR INITIATIVE IN PUNJAB

Integrated Productivity management in Cotton-Wheat Cropping System

Key achievements:

- Control of Whitefly in Cotton which threatened Cotton cultivation in 2015-16
- Developed strategy with line departments. New methods like Border rows of Sorghum/Maize were introduced to check inter field spread of the pest and regular advice was sent through mKRISHI.
- Radio talks held regularly (April 26, 2016, August 9, 2016, November 8, 2016 and January 31, 2017) to acquaint farmers on cultivation of cotton and Wheat
- Regular monitoring through Kheti Doots/Weekly review with line departments done which resulted in giving feedback to University and DoA, Punjab to manage the situation.
- Existing partnership with PAU and DoA was strengthened with increased credibility of RGR. Scout model well appreciated and Kheti doots trained by RGR were deployed by DoA with additional grant. BCI approved 1.5 Crore for coverage of additional 200 villages for 2017-18.

Integrated Productivity management in Basmati based Cropping System

Key achievements:

- A total of 600 villages provided advisory on Basmati based Cropping System
- Berseem cluster development in Gurdaspur district
- Area under basmati cultivation in adopted villages increased from 126,309 ha in 2015 to 127,825 ha in 2016
- Soil (1098 nos) and Water samples (721) testing facility provided to farmers
- Over 95% farmers adopting the Seed and Nursery treatment for check of Foot Rot disease
- Berseem Seed production area expansion undertaken

Field demonstration with Sorghum on Boarder

Review with line departments (PAU and DoA)

Seeds of Prosperity

Berseem or Egyptian clover (Trifolium alexandrium) is a nutritive, succulent, palatable and digestive winter fodder which is called "King of the fodders", especially in areas where irrigation water is available in plenty. The roots of the Berseem plant consist of nodules, which increase aeration in the soil and become a source of making symbiotic relationship with the Nitrogen fixing bacteria, which synthesize, a simple nitrogen compound from the free nitrogen in the atmosphere as fertilizer to the plant. Thus cultivation, not only gives a most wanted fodder, but also improves physical properties of the soil, which results in higher yields from the next crop grown on the same piece of land.

The growing season of Berseem extends from September to May in Northern India. It gives 3-6 cuttings with average fodder yield of 875-1000 qt/ha, in addition 7.5-10 qt seed /ha. The crop is important alternative to crop rotation, as apart from providing fodder for the animals, the crop residue help in improving the soil health though N fixation and adding organic carbon in soil. In Gurdaspur district, the total area under Berseem is around 13,215 ha.

In RGR "Basmati Based Cropping System project", the farmers requested for guidance on the improved varieties with higher yields vis-à-vis good seed yield. Taking this ahead, one Cluster was selected for high yielding Berseem varietal trials. In this cluster, farmers were cultivating local varieties of Berseem, whose cuttings are less than PAU recommended varieties and the market price of seed was also low. So two improved Berseem varieties i.e BL-1 and BL-10 seed was given in 5 villages to Berseem growing farmers for testing purposes. In these villages Comparative check with local variety was also kept to compare the improved verities. Farmers were given necessary advisory on best practices to raise the crop. Currently an area of around 300 acres was under Seed production in 2016-17. While earlier mostly the local desi variety was cultivated, at present 50% of total area is under the improved variety BL-10. Under normal conditions local variety gives 3-4 cutting before seed setting and 80 to 100 quintal per cutting, so total fodder yield is 320-400 q/acre. BL10 variety gives 5 cuttings and 80-100 quintal per cutting, so total fodder yield is 400-500 q/acre.

Seeing the benefit of the varietal trials under the guidance of RGR Cell, Palwinder Singh of village Khokhar Rajputana looked at the potential of increasing the Seed production of the crop as the availability of the improved varieties was limited in the area. The advice was given by RGR Cell team bring in experts from KVK and PAU and DoA. Though he was doing the Seed production since the last 12 years but the scale was small and his more attention was towards buying the seed from the local farmers in Gurdaspur and then after cleaning and grading he used to sell the seed to Jalandhar, Amritsar in Punjab and Jammu & Kashmir. RGR Cell has further brought other farmers alongwith Palwinder Singh to enter into the Seed Production. To provide long term sustainability to the Bersem growers and market linkage the RGR Cell has now linked these farmers with the Maharaj Ranjit Singh Agriculture Producer Company, Hoshiarpur. A total of around 50 farmers have been added to the PC and more would be added in near future. Members are now doing the seed production for MilkFed, Verka and India Seed Company under the buyback arrangement. The scope from the seed production alone can be glanced from the fact that group members produced around 90 tons of Seed of both varieties on around 300 acres which would amount to a net profit of about 1.50 crore during 2016-17. Khokhar Rajputana is now emerging as potential 'Seed Cluster" of berseem!

Deployment of IT tools for transfer of Technology: mKRISHI® application was refined and deployed to around farmers.

Key achievements:

- Mobile based agro advisory services (mKRISHI ®) deployed across 1,408 villages in Punjab and Tamil Nadu. Approximately, 167,000 farmers across both states received crop-specific agro-advisory in both Voice and SMS format throughout both Kharif and Rabi seasons. Market linkages undertaken for sweet corn, peas and tomato growers in Punjab.
- Bulk uploading sheet refined with minimum entry field, Crop protocols re-deployed for Cotton, Basmati and Wheat
- Need based Alerts issued (This is apart from what is there in regular crop protocol)
- Feedback collected from 1800 farmers on mKRISHI service

Popularizing mKRISHI in field

Improving nutritional status of farming families

During 2016-17, the RGR Cell promoted and popularized nutrition gardening with 500 farming families from eight districts. The farmers have shown keen interest in its adoption. 500 families participated in the demonstrations, adopting slight modifications; Notably, farmers managed Nutrition Gardens across a small area of 6 x 6 square meters with their own inputs and resources without spending anything on seed, fertilizer, pesticides, etc. Adoption of kitchen gardening as a strategy to improve health and overcome nutritional deficiencies, especially in children and women, has been recommended.

Nutrition Garden

Linking farmers with Markets

Key achievements:

- Five fully functional Producer companies
- Market linkage with Pagro foods and Cremica
- Linkage with State Department of agriculture for machinery/equipment and KVKs for advisory
- Training and Exposure visits of farmers and members of PC

PC Members from Hoshiarpur PC displaying their Products at Kisan Mela held by PAU at Ludhiana

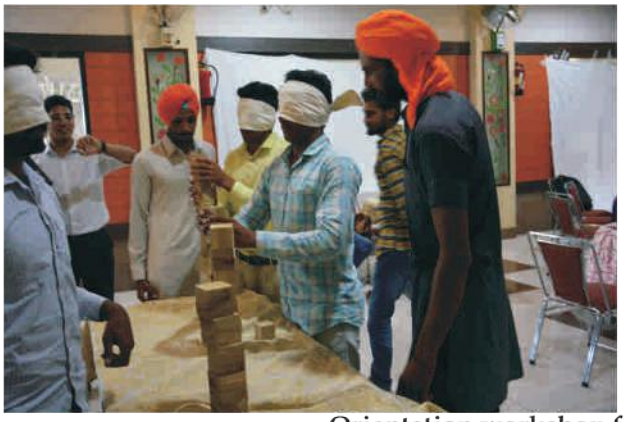
Location Distt./ Block/ Village	**PC name (Commodity)**	**Date of Registration**	**Registration number**	**Contact Person**
Barnala Barnala Sekha	SEKHA AGRICULTURAL PRODUCER COMPANY LIMITED (Vegetable)	22-10-2013	U01403PB20 13PTC038037	Mr. Mandeep Singh 09855821022
Hoshiarpur Bhunga Sheikh	MAHARAJA RANJIT SINGH AGRI PRODUCER COMPANY LIMITED(Groundnut)	14-11-2013	U01403PB20 13PTC038098	Mr. Dharam Singh 094171 42160
Mansa Jhunir Peron	MANSA AGRI PRODUCER COMPANY LIMITED(Groundnut)	25-11-2013	U01403PB20 13PTC038125	Mr. Jasvir Singh 08437731152
Sangrur Dhuri Inna-Bajwa	INNA BAJWA AGRI PRODUCER COMPANY LIMITED(Groundnut)	16-12-2013	U01403PB20 13PTC038194	Mr. Malkit Singh 098550 41460
Amaritsar Ajnala Makowal	MAKOWAL AGRI PRODUCER COMPANY LIMITED(Green gram)	15-01-2014	U01403PB20 13PTC038285	Mr.Balwinder Singh 09463570646

Tata Dairy Mission

Under the Tata Dairy Mission, the Trusts are partnering with "Dairy Health and Nutrition Initiative India Foundation (DHANII)" - a Section 8 Company - to sustainably enhance incomes of milk producers by building their capacity vis-à-vis milk production, animal health, breed improvement and animal nutrition. To ensure fair prices for their milk, these producers are being organized under Producer Companies, which are equipped with latest technologies, infrastructure and assured market linkages.

During the year, the Trusts supported the establishment of 4 Milk Producer Companies (MPC) with technical support of NDDB Dairy Services (NDS), with the objective of transforming the economy of 800 villages across geographies in Rajasthan, Punjab, Uttar Pradesh and Gujarat, where interventions are ongoing.

In Mansa, Ruhaanii Milk Producer Company ltd has been established. Company was registered on October 21, 2016 and got operationalized on February 12, 2017. So far, 900 members have become members of the producer company and are pouring around 3,000 litres of Milk per day.



Orientation workshop for First Subscribers-MPC-Ruhaanii Milk Producer Company Limited, Mansa (Punjab)

WATSAN project in Mansa

To support Govt of Punjab on Water and Sanitation project, RGR Cell partnered with Govt of Punjab under Tata Water Mission project and Swachh Bharat Mission (G) of Govt of India. Following activities were carried out:-

CLTS Training-Sanitation Mapping

- SARAR/CLTS Training held at Mansa for Motivators and Master motivators, Staff from DWSS, Punjab (July 21-22, 2016)
- Additional CLTS trainings held for Patiala and Nawan Shaher Motivators/DWSS staff on August 10-11 & 12-13, 2016
- VLC trainings conducted in 7 districts (November 25-28, 2016), training around 350 staff members on Water and Sanitation
- IHHL survey conducted in 126 villages

PROGRESS OF RGR INITIATIVE IN TAMIL NADU

Programme Goals and Objectives for 2016-17

The success achieved in 2015-16 season while implementing the multi-faceted (human and animal nutrition) livelihood intervention approach, the results have been far reaching in the areas unaddressed in the previous three seasons. Therefore, it has allowed RGR Cell to expand operations to the entire Perambalur district covering the predominant crops viz. i) Cotton ii) Maize and iii) Onion of the region in the 2016-17 season.

The piloted interventions of Azolla as an alternate low-cost livestock feed and backyard kitchen garden model in 2016-17 have gathered good response from the beneficiary farmers especially women, who play a key role in the agricultural activities of a farming household in Tamil Nadu.

RGR Cell strengthened communication strategy through setting up village level blackboards and interactive wall-paintings with dedicated messages on the core interventions to create awareness of best agricultural practices. The blackboards were updated periodically during peak crop season by Scouts with latest technical/pest/disease related information. Pest and Disease posters with Economic Threshold Level (ETL) in common-places ensured farmers read the posters and implemented its recommendations.

Further, the integration of information technology in agricultural practices through mKRISHI service for timely crop advisory on IPM cotton and maize were designed before on-set of the season. Protocols for the mandated crops were uploaded on a dedicated web console for RGR, Tamil Nadu which disseminated the farmer specific crop advisory vide IVR calls and SMSs from pre-sowing practice to market price. Initially started in Veppur block, the service now covers a farmer base of more than 30,000 farmers across the district covering all four blocks

- Net profit realized by IPM-Cotton farmers was Rs.15,837/acre as compared to Rs. 11,450/acre achieved by Non-IPM farmer.
- Net profit for IPM-Cotton plot ranged from Rs.26,826/acre in Agaramsigoor village to Rs.8,028/acre in Othiyam village.
- IPM farmers received an approximately, an additional 1 quintal of cotton yield as compared to non-IPM farmers.
- IPM farmers saved approximately Rs.1,000/acre through applying only recommended dosages of fertilisers as compared to non-IPM farmers.
- Non-IPM farmers on an average sprayed 4.8 sprays, as compared to 3.47 sprays by IPM beneficiaries..

An overview of the activities of 2016-17

Integrated Interventions. Saturating Project area covering the entire district.

The RGR Cell doesn't believe in providing subsidies to encourage adoption of practices. Rather the Cell believes in demonstrating the efficacy of a practice – which if effective would promptly be adopted by fellow farmers. With this approach, the RGR Cell introduced the IPM Package of Practice (PoP) for Maize, Azolla cultivation and backyard nutrition garden cultivation as add-on interventions to its existing IPM-Cotton programme.

Soil Health: In line with the Government mandate to promote soil health, the RGR Cell undertook large-scale soil testing across Veppur block. From each village, 100 farmers were organized and training provided with the assistance of the Department Soil Scientist on correct method of sample collection. Mobile soil testing vans were arranged and the RGR Cell team ensured that all 1350 farmers received their soil health cards for their respective fields. Village level "Scouts" nominated for each village, worked with farmers throughout the season to ensure that the soil test recommendation was implemented in the

farmers' field. The importance of maintaining soil health was disseminated on a large scale to project farmers and farmers were encouraged to adopt practice of using farmyard manure or sheep penning to improve soil fertility and yield. Further, bio-fertilizers (Azospirillumand Phosphobacteria) and Mn mixtures were also applied in IPM fields

Pre-season Training: Lack of access to timely advisory is one of the major reasons for farmers adopting non-recommended PoP and consequently, increasing their cost of cultivation. To address this downside, RGR Cell identified active progressive farmers "Scouts" from each Panchayat village and provided them with proper training on adoption of IPM practices in Cotton; Maize; Red gram; and Onion. Also, on field trainings for Nutrition Garden and Azolla cultivation were undertaken in the respective beneficiary's field. This training provided farmers with a "familiar face" to approach and seek advice.

Further, the technical knowledge of each Scout was tested by the RGR Cell Consultant (Cotton) and wherever, required refresher trainings were provided to ensure that only correct information is being communicated to farmers. Scouts were further educated on "how to approach farmers" to spread IPM technology and increase outreach.

Awareness Generation and Community Mobilisation: Mid-season trainings and timely on-field/village level trainings were provided in common areas of the village and farmers were educated on the adoption of IPM practices to be followed for Cotton; Maize and Onion. Farmers were encouraged ask queries regarding their crop. Field visits to the farmers' field were arranged to directly assess the situation and recommend advisory accordingly. Scouts pro-actively inspected farmers' fields and wherever, problems were noted the farmer was contacted and Scout ensured that necessary control measures were adopted.

Wall paintings and flex displays at common places with key PoP for pest and disease management proved to be a major pull-factor for farmers to learn new technologies and adopt the same. The IPM PoP was divided into individual leaflets providing information of practices to be undertaken every 30 Days. This provided farmers with exactly the amount of information required at the time and made it easier for farmers to adopt recommended practices. A total of 54 IPM-Cotton and 18 IPM-Maize demonstration plots were set up in the 27 project villages to encourage other farmers to adopt IPM PoP. Through trainings etc. RGR Cell was able to reach approximately, 3,000 farmers in Veppur block in 2016-17. Over the past three years, RGR Cell has covered close to 10,000 farming households in Perambalur district.

Integration of IT in agriculture: The launch of mKRISHI IT service had created the much desired impact on the awareness generation front. A dedicated web console for RGR Tamil Nadu was set up with protocols uploaded for mandated IPM crops. The system was tuned in a mode where the registered farmer would receive the advisory as IVR calls and SMSs starting from pre-sowing to post harvest practices that needs to be followed.

Ms. Khorshed Talati, Team Leader, RGR TN addressing the farmers gathered for Field Day in Periyavenmani village

Also, apart from the regular advisory messages, alerts were sent during peak pest period to caution the farmers on the possible pest infestation. In the last season, alerts for Azolla as an alternate livestock feed and significance of backyard kitchen gardening was issued to Veppur farmers. The alerts sent out for Azolla and backyard kitchen garden had very good

reception from the farmers and post the alerts, there farmers contacted the respective block's field officer for Azolla technology/starter culture. This saw a considerable increase in the especially in thePerali village. The system despatched 1 lakh plus messages during 2016-17 as protocols; alerts; weather information; and general advisory.

Foliar Spray: Based on the Punjab experience, farmers were encouraged to adopt 4 sprays of 13:0:45 (NPK) at weekly intervals from the time of flowering in Cotton. As compared to the commonly adopted 19:19:19, 13:0:45 provides the plant with much needed nutrition to increase flowering and reduces boll shedding. This was the third year that 13:0:45 was promoted by RGR Cell and there was widespread adoption of the same. Most farmers had seen the benefit of 13:0:45 spray in their neighboring farmers' fields during the past two seasons and promptly adopted the practice in this season.

Cost of Cultivation and Net profit:

Owing to intensification of IPM technology dissemination adopting human resource and integrating IT, the farmers have become prudent in approaching the scouts and field officers during peak crop season for adopting appropriate agricultural practices for their field. The previous season (2016 – 17), the cost of cultivation for IPM farmers was Rs. 26,746 comparatively lower than non-IPM farmers who spent Rs. 31,547. In turn, IPM farmersrealized a net profit of Rs. 15,837/acreas compared to non-IPM farmers who received Rs. 11,450/acre. The spray count also decreased from the last season: it came down from 4 sprays in 2015 - 16 to 3.47 in 2016-17 and in non-IPM farmers it remained the same (4.3 in 2015 – 16 and 4.8* in 2016-17).

Azolla Cultivation: The TATA Trusts had provided an initial phase of support to Tamil Nadu Agricultural University (TNAU), Coimbatore for the popularization of Azolla cultivation as a feed supplement for cattle and poultry. As part of this, TNAU Scientists promoted Azolla cultivation in Coimbatore district as well as standardized the feed ratios for cattle, pigs, ducks and poultry. Based on this experience and with the knowledge that after agriculture, livestock is the next biggest source of income in Perambalur, RGR Cell on an experimental basis initiated popularization of Azolla cultivation in Perambalur in 2015 - 16.

In the past, farmers in Perambalur district attempted Azolla cultivation, but in the absence of correct technical procedure – most ended up with Azolla becoming as a weed in open ponds. Thus, once again Azolla was unsuccessful in adoption. RGR Cell decided to expand the result of TNAU pilot project to Perambalur and started a few Azolla pits in Veppur block. Based on the survival and good growth in these pits, RGR Cell approached NABARD for financial support to conduct a 3-day capacity building programme including an exposure visit to a nearby Azolla farm. This would expand the outreach of Azolla, further popularizing it to make it a suitable supplemental feed and substitute green fodder for small and marginal farmers.

Azolla feeding to pigs in Paravai Village, Perambalur

Azolla Success Story

Thiru Perumal is a small farmer from Paravai village owning 2 acres of land and cultivating Cotton. He supplements his income through piggery which he sells for meat purpose. Being a rainfed region, both dry and green fodder are in short-supply and becomes expensive during lean months. On an average Perumal spends Rs. 700/month/pig on feed to maintain proper weight and health of his pigs. After rearing for 5 months, he earns approximately, Rs. 6,500 – Rs. 7,500/pig. However, this is a very niche market in Perambalur and there is limited demand for pork. The feed mixture he uses is a mix of rice, maize and waste material. It is known that Maize fed fresh has 12.1% protein content while in comparison, wet Azolla protein content is over 19%. Though the feed is enriched with calcium and other minerals, it is not a natural food and lacks in omega fatty acids which are essential for animal health.

The change agent: Training on azolla

Wonder Fern - Azolla

Prior to the training conducted by Reviving Green Revolution (RGR) Cell, Perumal was unaware of Azolla and its benefits. Through his participation in the 3-day training programme conducted by RGR Cell and supported by NABARD and TATA Trusts, Perumal was introduced to the benefits of Azolla cultivation. He learnt that Azolla is a water fern which is rich in proteins, essential amino acids, omega fatty acids, vitamins and minerals. Due to its high protein and low lignin content, livestock easily digest it and quickly go accustomed to it. Further, he noted that for initial feed shyness he should mix Azolla with regular feed and feed his pigs. Once accustomed his pigs would enjoy eating Azolla and it would improve their health and growth. After an initial 15 day period, Perumal would be able to harvest approximately, 250 gm/day/pit of Azolla and each nursery would be sufficient to feed 2 animals.

Perumal says, "Azolla has been a boon to me. My pigs are much healthier now and I've been able to feed, fresh, organic green feed".

During the training, he was taught how to set up an Azolla nursery and provided with the initial Azolla starter culture. The RGR Cell staff assured him of providing him further technical hand-holding post the training as well to ensure that he is able to harvest the full benefits of Azolla. Post the training he set up 1 Azolla nursery and started feeding his pigs. After 2 weeks, he was convinced of its benefits and once again contacted RGR Cell staff to increase the number of Azolla nurseries. Today, he has 4 Azolla nurseries from where he feeds his 15 pigs on a daily basis. For the first time, he can feed a highly nutritious low-cost, organic feed to his pigs on a daily basis even in off-season summer months. Now, not only is Perumal convinced of the benefits of Azolla, but also he encourages other farmers to similarly take up Azolla and use it as a supplemental feed for their poultry and livestock.

Backyard Nutrition Garden:

The TATA Trusts had provided an initial phase of support to Tamil Nadu Agricultural University (TNAU), Coimbatore to implement varied models of backyard nutrition gardens in Dharmapuri district of Tamil Nadu. Based on the experiment in Dharmapuri, RGR Cell invited Dr. Indhumathi, Scientist, KVK, Dharmapuri to provide technical assistance for setting up backyard nutrition gardens in Veppur block. Through this 70 nutrition gardens were set up in the project villages. To encourage the women farmers to develop backyard kitchen garden vegetable seedling such as tomato, brinjal, chilly raised by scouts were distributed to women folk and children.

In continuation to the previous season's trainings on setting up back yard Nutrition Garden, during 2016-17, the established gardens were thoroughly monitored by the respective village scout. The field officer would inspect the beneficiary layout every week to track progress of the garden's vegetable yield/crop cycle and recordings of the same were noted. The gardens of the current season were laid out with proper channels for waste water inflow from household activities. The beneficiary selection for the seeds/seedling distribution was focused towards small and marginal farmers with 25% contribution from the beneficiaries.

RGR CELL AS RESOURCE CENTRE FOR TECHNICAL SUPERVISION AND SUPPORT TO OTHER CELLS/ TRUSTS INITIATIVES

- The RGR Cell trained 15 Personnel from Associate organizations of Tata Trusts
- Five members from KVY provided orientation in agriculture (September 12-17, 2016)
- Ten members from SBI provided orientation in agriculture (August 21-17,2016 & September 4-10,2016)

Tata Trusts Associate Organisation SBI team members being trained in Agriculture by RGR Experts

Plans for 2017-18:

- Saturating the validated Package of Practices of Integrated Productivity Management in Cotton-Wheat and Basmati based Cropping Systems in Punjab across 1,500 villages.
- Bringing more subscribers on board the mKRISHI ® platform, taking the overall count to 400,000 across Punjab and Tamil Nadu.
- Fully operational Milk Producers Company covering around 3,000 households across select clusters in Mansa district, Punjab resulting in additional household income through sale of milk.
- Developing an agri-input and vegetable sale business for Chinnaru Farmers Producer Group.
- Implementing small-scale rainwater harvesting methods in Tamil Nadu for providing atleast 1-2 critical irrigations during drought/inadequate rainfall.
- Scaling up operations to 4 districts and replicating the learnings from Perambalur district.
- Initiating dairy operations in northern districts of Tamil Nadu.
- Scaling potential of Azolla cultivation and experimenting with commercial production of Azolla.
- Piloting new varieties of Red Gram, Black Gram and Green Gram in Perambalur for increasing productivity and providing supplemental income to the family through an additional crop.

ANNEXURE - I

PROJECT BLOCKS

Cotton-Wheat Cropping System/BCI project	
District	**Blocks**
Bathinda	Mour; Bathinda; Nathana; BhagtaBhaike; Sangat; Rampura
Faridkot	Kotkpura
Fazilka	Abohar; Khuian Sarvar; Arniwala; Fazilka
Mansa	Jhunir; Mansa; Bhikhi; Budhladha
Sangrur	Sunam; Lehergagha
Shri Muktsar Sahib	Shri Muktsar Sahib; Malout; Giddrebaha
Basmati Based Cropping System project	
Amritsar	Chogawan; Tarsikka; Harsha Chhina; Majitha; Attari; Verka; Ajnala
Gurdaspur	Gurdaspur; Dinanagar; Fatehgarhchurian; Dera Baba Nanak; Dhariwal; Kalanaur
Tarn Taran	Tarn Taran; Gandiwind; Chohla Sahib; Patti; Valtoha; Bhikhiwind

FINANCIAL HIGHLIGHTS 2016-17

BALANCE SHEET AS AT MARCH 31, 2017

Particulars	As at March 31, 2017 (In Rupees)	As at March 31, 2016 (In Rupees)
FUNDS AND LIABILITIES		
FUNDS		
(a) Earmarked Funds	19,809,720	23,215,922
(b) Fixed Assets Fund	924,173	896,473
(c) Income and Expenditure Account	20,359	18,694
	20,754,252	**24,131,089**
LIABILITIES		
Current Liabilities	-	476,520
	-	**476,520**
TOTAL	**20,754,252**	**24,607,609**
ASSETS		
(a) Fixed assets	924,173	896,473
(b) Loans and advances	135,980	3,373
(c) Cash and bank balances	19,694,099	23,707,763
TOTAL	**20,754,252**	**24,607,609**

INCOME & EXPENDITURE ACCOUNT FOR THE YEAR ENDED MARCH 31, 2016

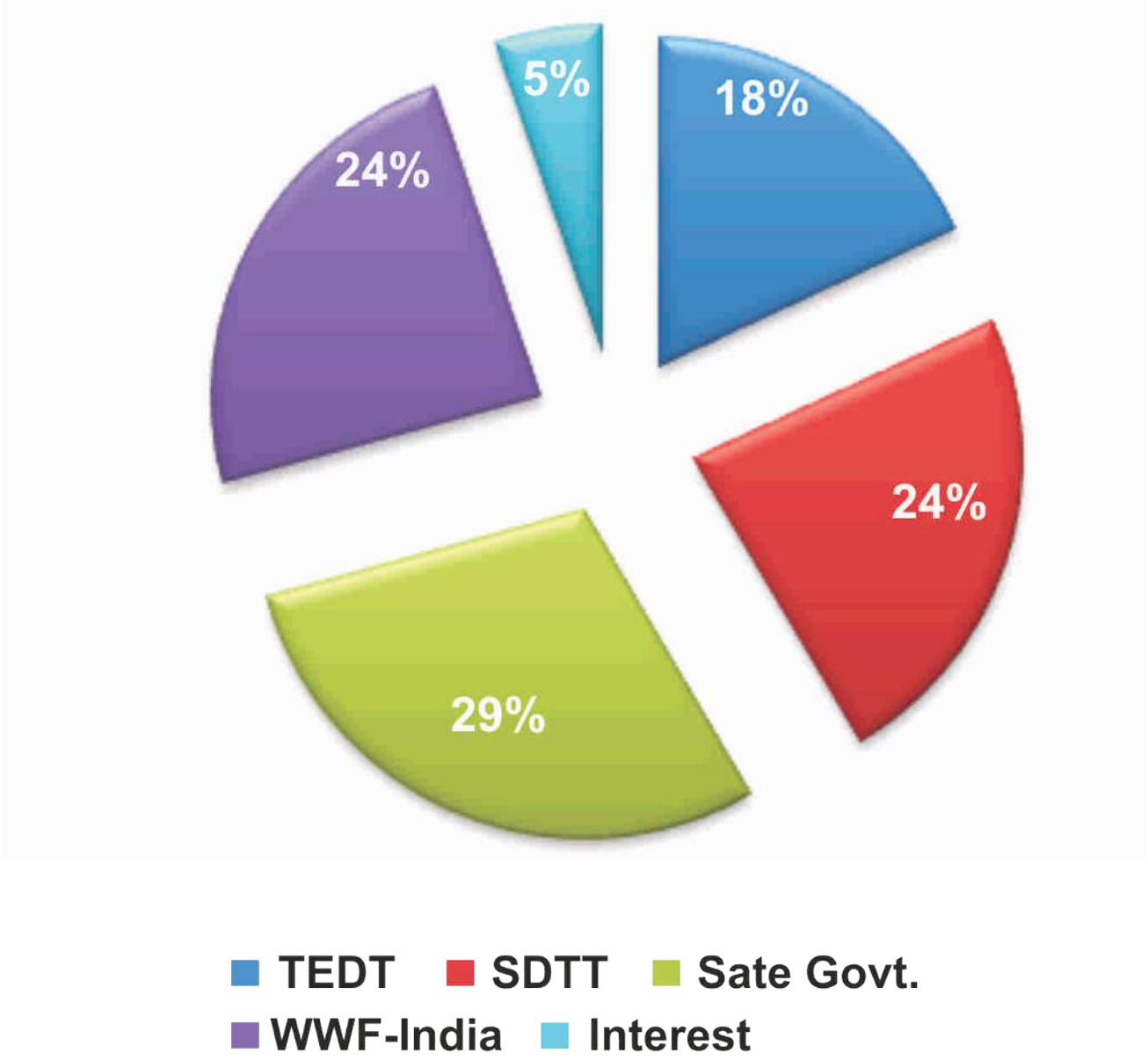
Particulars	For the year ended March 31, 2017 (In Rupees)	For the year ended March 31, 2016 (In Rupees)
Income		
Transfer from Earmarked funds	36,623,937	35,058,293
Transfer from Fixed Assets fund	178,398	174,494
Other income	1,665	18,694
Total Income	**36,804,000**	**35,251,481**
Expenses		
Expenditure on objects of the Society		
(i) Grant paid	1,627,241	4,469,807
(ii) Project expenses	31,547,771	27,987,678
(iii) Establishment expenses	3,448,925	2,600,808
(iv) Depreciation and amortization expense	178,398	174,494
Total expenses	**36,802,335**	**35,232,787**
Excess of Income over Expenditure	**1,665**	**18,694**

EARMARKED FUNDS		
Particulars	**As at March 31, 2017 (In Rupees)**	**As at March 31, 2016 (In Rupees)**
Balance at beginning of the year	23,215,922	22,956,992
Add: Received during the year	32,413,411	33,965,968
Add: Interest Income received during the year	1,784,481	1,695,968
Less: Transferred to Income and Expenditure Account	(36,623,937)	(35,058,293)
Less: Transferred to Fixed Assets fund	(206,098)	(55,386)
Less: Refunded during the year	(1,059,588)	(289,327)
Add: Amount refunded by onward grantee/other transfer	285,529	-
	19,809,720	**23,215,922**

FIXED ASSETS CAPITAL FUND		
Particulars	**As at March 31, 2017 (In Rupees)**	**As at March 31, 2016 (In Rupees)**
Balance at beginning of the year	896,473	1,015,581
Add: Transferred from Earmarked Funds	206,098	55,386
Less: Utilised during the year	(178,398)	(174,494)
	924,173	**896,473**

INCOME AND EXPENDITURE ACCOUNT		
Particulars	**As at March 31, 2017 (In Rupees)**	**As at March 31, 2016 (In Rupees)**
Balance at beginning of the year	18,694	-
Add: Excess of Income over Expenditure	1,665	18,694
	20,359	**18,694**

SOURCES OF FUNDS



Reviving Green Revolution Cell is registered under :

Society Registration No.	:	**680 of 2007-08**
Foreign Contribution Regulation Act (FCRA) No.	:	**115300042**
Registration u/s 12AA (1)(b)(i) of the Income Tax,1961	:	**CIT-III/JB/12A/242/10-11/694**
Exemption u/s 10(23C)(iv) of the IT Act, 1961	:	**CCIT/LDH/JB/10(23C)(IV)/145/2009-10/2821**
Permanent Account Number	:	**AAAAR6284L**
Tax Deduction Account Number	:	**JLDR03215C**

OUR BANKER

State Bank of India, Punjab Agricultural University Branch, Ludhiana

STATUTORY AUDITOR

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INTERNAL AUDITOR

M/s PKF Sridhar & Santanam LLP, Mumbai

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NOTES :

NOTES :

An Initiative of TATA TRUSTS

REVIVING GREEN REVOLUTION CELL

(Associate Organization of TATA TRUSTS)

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