



BRINGING GREEN REVOLUTION TO EASTERN INDIA  
[BGREI]

A REPORT on

# BGREI PROGRAMME IN SATYABADI BLOCK



## SECTION-1

### ABOUT THE IMPLEMENTING AGENCY

DEVELOPMENT RESOURCE CENTRE popularly known as DRC came into existence in the year 2005 and got legal sanctity on 13th. April 2006 by Addl. Registrar of Societies, Puri under Indian Societies Regn. Act of 1860(XII). In the year 2010 DRC was registered under section 12AA of Indian Income Tax Act. 1961. It is also affiliated to Nehru Yuva Kendra, NYK, an autonomous body under the Ministry of Youth Affairs & Sports, Govt. of India. DRC is affiliated with LIFE INSURANCE CORPORATION OF INDIA (LIC) for carrying out and catering micro insurance services among the toiled class in rural & urban Odisha.

#### REGD. / COORDINATION OFFICE .....

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#### PROJECT OFFICE .....

- At/Po-Baral, Via-Satasankha, Block-Satyabadi, Dist-Puri, Odisha-752046
- At-Dakhinapantal, Po-Nagar,Via/Block-Astaranga, Dist-Puri, PIN- 752109, Odisha, India
- At-In front of Rly. Malagodam, FCI Road, Kudiary Bazar, Jatni, Dist-Khurda, PIN- 752050, Odisha, India,

#### NATURE OF THE ORGANISATION .....

DRC is a Non-Governmental, Non-Profit Making, Non-Political, Socio-Economic & Developmental Organization.

#### MISSION STATEMENT .....

The mission of DRC is establishment of a sound, effective and meaningful society through organized community effort, aiming at systematic & scientific development of un-organized, vulnerable and poorest of the poor community where haves and the have-nots live at par with following the values of sustainable development, Global Commonhood and empathy towards each other.

#### OBJECTIVE OF DRC .....

Empowerment of the poorest of the poor, marginalised, neglected, down trodden, mentally & physically challenged, disaster victims, destitute, women and children and the disadvantaged community through group formation, capacity building, sharing of information, knowledge, imparting training, organising exposure and demonstrations, providing platform for alternative livelihood systems, enabling conducive environment through participatory intervention in fulfilling their rights and discharging their fundamental duties towards the nation and mainstreaming their active participation in sustainable development.



### WHY BGREI became Success?

- Harnesses the water potential for enhancing agriculture production in the area which was hitherto under-utilized.
- Higher yields than conventional method.
- Reduced duration & input
- Low incidence of pests and disease noticed due to lustrous and healthy growth of the crop
- Line transplantation method is a boon to the production of Breeder/ Foundation/ certified seed
- Farmers can produce their own seed easily by ensuring quality
- Better utilisation of fertilisers
- Less water requirement
- Soil structure improved through microbial activity
- Low seed rate @ 24 kg/acre
- 10-15 days old nursery is used for planting;
- Mechanical weeding with cono weeder facilitates the incorporation of green matter into the soil;
- Progressive farmers played as role model for other potential farmers.

### What We Think to Add-.....

- Formation of Cluster Level Potential farmers Committee & Block level Progressive farmers 'Committee.
- Converging all Agricultural Programmes and MNREGA programmes for broader impact.
- Large scale campaign through IEC materials.
- Lobby & Advocacy.
- Involving more Share Croppers, Agricultural labours into the BGREI Fold.
- Involving women, PWIDDs, Widows, destitute, Disaster victims, HIV/AIDS victims, war victims, physically challenged community etc in the process of BGREI.

### SUCCESS STORY OF HARI HAR DIXIT.....

Mr. Harihar Dixit aged about 36 years, educational qualification B.A. of village Baral of Kadua GP under Satyabadi block is a successful Progressive farmer. During our community consultation meetings conducted at village level, staff of DRC identified Harihar as a progressive farmer. Hari is simple, hard working but an unemployed young man. Among all his three nos. married sisters Hari is the only son of his father Mr. Benudhar Dixit a two time former Sarapanch of Kadua GP.



Hari possesses an ancestral property of about 20 acre crop land. Most of the times Hari's father was cultivating the land with traditional method. When Hari was selected as progressive farmer by DRC with consultation of the Agriculture officers of the Block, he expressed a good favour proving him as a model farmer for others. After attending 2nos. awareness and programme orientation meeting conducted by DRC, he started 5 acres land cultivating under BGREI. Hari adhered to most of the methodologies prescribed under BGREI. In comparison to other farmers Hari started agricultural activities in all his 5 acres demo land wisely utilizing the inputs like seeds, fertilizers and pesticides & other inputs followed by agronomic practices. He started frequent dialogue with agriculture experts, agronomist, scientist and other Govt. officials whenever they pay their visit to the block demonstration unit. Though Hari was not a professional farmer still his strong commitment, endeavor and sincerely made him a successful farmer who became a role model for others. Not only Hari worked for himself but also helped his co-farmers a lot. Being a progressive farmer he discharged his duty with utmost sincerity. He exclusively mobilized 177 potential farmers bringing them to BGREI fold. Hari derived outcome from his 5 acres land 90 quintals of paddy @ 18 quintal per acre which he was getting 10-14 quintals per acre while adopting traditional method. Besides all the inputs provided to potential farmers Hari was provided with a Power weeder, he used the power weeder for his agricultural purposes and shared it among others as and when needed. Thanks Hari for changing his attitude and adopting the agronomic practices prescribed under BGREI. BGREI has made the unemployed Hari to the self employed Harihara.



### ଧାଡ଼ି ଧାନରୁଆ ପାଇଁ ପ୍ରୋତ୍ସାହନ

ସତ୍ୟବାଦୀ, ୨୧୭ (ନି.ପ୍ର): ଭାରତ ସରକାରଙ୍କ ରାଷ୍ଟ୍ରୀୟ କୃଷି ବିକାଶ ଯୋଜନାକୁ ନେଇ ସତ୍ୟବାଦୀ ବ୍ଲକ୍‌ର ବାରଭାଗରେ ଥିବା କାଦୁଆ, ବଳପୁର, ବିଦ୍ୟାଧରପୁର, ଦୁରଜ, ବିଶ୍ଵନାଥପୁର, ଜୟପୁର, ପେଣ୍ଠପଡ଼ା ପଞ୍ଚାୟତରେ ଗ୍ରାମ୍ୟ ରାଷ୍ଟ୍ର ପାର୍ଶ୍ଵରେ ୫୦୦ ହେକ୍ଟର ଜମି ଚିହ୍ନଟ କରି ଏକର ପଛା ୨ ଟଙ୍କା ବିହନ ଯୋଗାଇ ଦିଆଯାଇ ଧାଡ଼ି ରୁଆ ପାଇଁ ପରାମର୍ଶ ଦିଆଯାଇଛି । ଏହି ଯୋଜନାରେ ସେବାସେବା ସଂସ୍ଥା ଦ୍ଵାରା ପଞ୍ଚାୟତରାଜ ପ୍ରତିନିଧି ଆଫିସ୍ ଓ ସରକାରୀ କୃଷି ଅଧିକାରୀଙ୍କୁ ସାମିଲ କରାଯାଇ ୩୫୦ ଜଣ ଅଗ୍ରଣୀ ବାସୀଙ୍କୁ ବିହନ ସାର ଏବଂ କାର୍ତ୍ତବ୍ୟକ ଔଷଧ ବିତରଣ ପାଇଁ ପରାମର୍ଶ ଦିଆଯାଇଛି । ଧାଡ଼ିରୁଆ ସାଙ୍ଗକୁ ଆବଶ୍ୟକ ପରିମାଣ ଖତସାର ପ୍ରୟୋଗ କରି ଅନ୍ୟ ବାସୀଙ୍କୁ ଏବିରରେ ଆକୃଷ୍ଟ କରାଇ ଉତ୍ପାଦନ ବଢ଼ାଇବାକୁ ଏହି ଯୋଜନାରେ ଲକ୍ଷ୍ୟ ।

The samaj, 03-07-2012

### OUTCOMES DERIVED.....

- 500 Hectors of Kharif Crop lands are covered through Line Transplanting under BGREI Scheme.
- About 800 nos. of Poor, deserving and BPL farmers are benefited under the scheme.
- Proper maintenance of plant population is noticed; as a result production rate is increased.
- Wide acceptance of Line Sowing and Transplanting
- 1200 nos. of BPL families, share croppers, daily wage earners are provided with direct employment support through this programme.
- Previously the Input cost in the shape of Seeds, water, manure, pesticide, management, labour, expertise, time etc per acre was high but the Line transplanting Scheme initiated in the area reduced the cost to low per acre.
- Other inter-cultural operations like de-weeding, fertilizer application, pest surveillance, spraying and harvesting in paddy cultivation etc have become easier for the farmers.
- Appropriate intra & inter row spacing reduced competition among the plants for soil moisture, nutrients and sunlight.
- The production per acre in the area prior to Line Transplanting was 8-10 Qntls . But the present assessment tells that the farmers who have adopted Line Transplanting have harvested 15-18 qnt. Paddy per acre.
- Local farmers are to some extent motivated regarding the difference between traditional method agronomic practices in agriculture.
- Farmers have realized the direct result through demonstration on their own crop lands.
- Breeder seeds /certified seeds are available with the potential farmers for future crop.
- Farmers are provided with scientific technology, modern usages, knowledge, Information, resources etc by the Agriculture Experts at their doorstep and became successful to interact on their livelihood issues and agricultural problems with high level Govt. Officials like RDC, IMAGE Technical Team and Sr. Scientist of CRR, DDA-Puri, PPO-Puri, DAO-Sakhigopal, PPO-Sakhigopal, AAO-Satyabadi, ATMA staffs and grass-roots facilitators like VAW, Krushak Sathi and many more.
- The impact of Line Transplanting is realized among the neighbor farmers. So many farmers have come forward to start agricultural activities through Line transplanting/ Line showing method.
- Massive Awareness Generation & Sensitization Programmes on Line Transplanting / line showing Schemes under BGREI are already organized among 5000 population of 23 nos. villages in 5 nos. GPs.
- Use of Drum Seeders by farmers created a new hope & role of Micro- Nutrient (Zinc Sulphate) in increasing the productivity is well understood by the Farmers
- Support of N.G.Os made the task of other stake holder easier
- Increase in Yield was significant (up to 50%)

### GEOGRAPHICAL AREA OF OPERATION .....

The area of operation of the organization is within the whole state of Odisha.

### PRESENT AREA OF OPERATION .....

- Puri District- Puri Municipality, Puri Sadar Block, Brahmagiri Block , Satyabadi Block, Kanas Block and Astarang Block.
- Nayagarh District--Bhapur and Khandapada Block.
- Khurda District-- Jatni Municipality, Balipatana , Tangi and Jatni Block .

### EXISTING ACTIVITIES .....

- National TB (RNTCP) & Malaria Eradication Programme in Astarang Block.
- Micro Insurance and Financial Inclusion Programme in 15 nos. Blocks of Puri , Khordha and Nayagarh district.
- Bringing Green Revolution to Eastern India (BGREI), Rashtriya Krishi Vikas Yojana (RKVY) and Promotion of Improved Agronomic Package & practices under State Plan Scheme & Line Transplanting programme in Satyabadi block of Puri district.
- National Environment Awareness Campaign (NEAC) in Puri district.

### OUR CORE SUPPORT GROUPS .....

- Ministry of Health & Family Welfare, Govt. Of india.
- Dept. Of Health, Govt. Of Odisha
- Ministry of Agriculture, Govt. Of India
- Dept. Of Agriculture, Govt. Of Odisha.
- Ministry of Env. & Forest, Govt. Of India
- Dept. Of Forest & Env. , Govt. of Odisha
- Centre for Environmental Studies, Bhubaneswar
- Dept. Of ST & SC Dev. , Govt. of Odisha
- Life Insurance Corporation of India, Bhubaneswar Division.
- Bank of India, Nabakalebar Road Branch, Puri
- Udaybhanu & Co. , Chartered Accountants, BBSR
- Full Time Staff 10nos. Volunteers - 15nos, and 5nos. Development Consultants.
- The District Administration-Puri and
- The People of our Project Area

### SECTION-2

### BGREI.....At a Glance

#### Genesis .....

The BGREI program is the outcome of the recommendations of the Task Force Committee constituted by GOI in pursuance of the decisions taken in the meeting of the Committee of Secretaries held on 29th November, 2009 to make short and medium term recommendations for efficient management of water, power and other inputs as well as subsidy to maximize agricultural production on a sustainable basis. The Task Force was inter-alias ascribed to assess the existing scenario of water resources development, utilization and management of food-grains production in the country, with a particular reference to North-Western and Eastern India, taking in to consideration the problems being faced due to over-exploitation of water resources in the States like Punjab , Haryana, Western Uttar Pradesh as well as to generate recommendations for developing infrastructure relating to water, power, marketing, storage and rural connectivity in Eastern and North Eastern regions of the country to support sustainable agricultural production. The major recommendations of the Task Force are reproduced as under:-



**The Aim .....**

The aim of BGREI program is efficient management of water potential, power and other inputs for enhancing agriculture production in Eastern India which was hitherto under-utilized.

**The scope & objectives...**

The scope of the program was initially determined considering the exploitable potential of agriculture with special reference to food grains production namely; rainfall area concentration of rice & wheat, existing productivity level of rice, wheat & pulses and social capital. The program of "Bringing Green Revolution to Eastern India (BGREI)"- a lateral to Rashtriya Krishi Vikas Yojana (RKVY) intended to address the constraints limiting the productivity of "rice based cropping systems" was initially launched in 2010-11 in eastern India comprising seven (7) States namely; Assam, Bihar, Chhattisgarh, Jharkhand, Odisha, Eastern Uttar Pradesh (Purvanchal) and West Bengal so that agriculture productivity is reasonably enhanced and stabilized in these areas. The BGREI program was announced in the Union Budget, 2010-11 with an allocation of Rs. 400 crore. During 2010-11, this program was implemented in all the seven BGREI States on the basis of the plans devised by these States. Most of the activities taken up under the BGREI program during 2010-11 were short term strategies. BGREI program continued during 2011-12 with an additional outlay of Rs. 400 crores as a lateral to RKVY. This program was conceptualized adopting focused approach on the medium & long term strategies for asset building activities relating to water conservation and utilization in combination with the short term activities pertaining to Transfer of Technology (TOT) of the major cereals preferably in non-NFSM districts (here-in-after called BGREI districts). The program consisted a bouquet of three broad categories of interventions, viz; (i) Block demonstrations of rice and wheat-short term strategy; (ii) Asset building activities consisting water conservation & utilization-medium term strategies; and (iii) Site specific activities-both short term & medium term strategies for facilitating the petty works such as construction/renovation of irrigation channels/electric power supply for agriculture purposes. The allocation of funds among these three major interventions was nearly 63% of the total funds for block demonstrations, 17% of the funds for asset building activities and 19% of the funds for site specific activities and about 1% of the funds were earmarked for monitoring activities at national level.

**BGREI in Odisha .....**

In Odisha during the year 2011-12 financial year 52,000 ha of rice demonstration was conducted in 52 clusters under 4 agro-ecological situations in 15 districts where NFSM (Rice) programme is not being conducted. In the year 2012-13, 1, 55,000 ha of Rice demonstration was conducted in 155 clusters in 30 districts. During the Kharif Odisha is targeted for implementing BGREI in 8 nos. Up land Rice Clusters, 64 nos. Shallow Low land Rice Clusters, 63 nos. Irrigated HYV Rice Clusters and 20nos. Hybrid Rice Clusters. The results obtained from crop cutting conducted in different districts depicts the performance of the Interventions like deep ploughing, Line sowing/ transplanting, application of weedicides, application of micronutrient Zinc, need based pest control techniques etc were successful. Further the involvement of Civil Society Organisations, NGO etc was remarkable.

**BGREI in Puri District .....**

Puri district consisting of 11 nos. Blocks, 230 nos. GPs, 1710 nos. Revenue villages having total geographical area of 2,64,988 hectares/3051 sq.kms, total cultivated land of 188745 hectares, total high land 46553 hectares, medium land 57654 hectares, low land 85438 hectares & total paddy area 170658 hectares. The Agricultural district is divided with 22 nos. JAO circles and 146 VAW circles.

In the year 2010-11 BGREI started in the district focusing programmes on Block Demonstration, Asset Building and Site Specific Activities. The programme is being organized headed by the Deputy Director of Agriculture, Puri Range along with assistance of District as well as Block level officers. Since the major crop of the district is Rice hence focus was on exploration of the yielding capacity of paddy crops. During 2012-13 Kharif the district was assigned by Govt. to implement BGREI programme in 3nos. shallow Low Land Rice Clusters, 4nos. Irrigated HYV Rice Clusters and 2nos. Irrigated Hybrid Rice Clusters covering total 9000 ha in 8 Blocks.



their Work Plan and submitted at organisation level through the Programme Coordinator. Likewise Weekly, Monthly and Daily Work Plans were developed. The Daily Work performances were monitored by the Programme Coordinator. The Secretary monitored the Programme organising Weekly Meeting and Monthly meeting with the Programme Coordinator and the programme staff. The Programme Coordinator is accountable to the Secretary, The Staff are accountable to the Programme coordinator, and The Secretary is accountable to its GB and the Govt as a whole. Each and every programme is being documented and necessary photographs are taken at the field and other programmes. Regular visit to the villagers, consultations with the potential as well as the Progressive Farmers has made us easier in making the Programme a successful one. Further we are in instant touch with the field level officials for taking their timely advice as and when required. Regular reporting are sent by the Programme coordinator for making update of the programme. The Chief functionary is in instant touch with the Block Level and District level Officials to minimise the communication gap.

**MEDIA COVERAGE .....**

The print & electronics media have extensively made coverage over the programme. The daily Odia news paper Dharitri and The Samaj published news on 28th June, 3rd July & 21st August-2012.



**BGREI**

**BGREI**



Mr. Prasanna Kumar Dalbehera, the DDA, Puri had visited our field more than five times. This frequent visit of the DDA encouraged both the farmers, Block level officials and the staff of DRC in enhancing their work efficiency. Mr. Bibi Ram Swain, PPO, Puri has visited more than 4 times. Mr. Susil Halder, DAO, Sakhigopal visited all our fields frequently. Further Mr. Harihar Barik, PPO, Sakhigopal, Mr. Ashok Ku. Das, AAO, Satyabadi have paid their visit to the field. Their instant interaction with farmers, DRC Staff and other stakeholders made the programme more systematic, transparent, effective and result oriented. On 30th Oct. 2012, PRI Members of Satyabadi Block consisting of 22 Sarapnch, 22 PS Members and 3 ZP Members along with Mr. Prachurya Hota, Chairman, ATMA, Satyabadi Block headed by Mr. Premananda Behera, Chairman of Satyabadi Panchayat Samiti visited various demonstration fields in Kadua, BRC Pur, Balapur, Dugal and Bidyadharpur GP. The PRI Members along with the both chairman highly appreciated the programme. They expressed their happiness on excellent performance of DRC and tendered thanks to the farmers and the concerned Govt. Officers.



#### POST HARVEST ASSESSMENT THROUGH SAMPLE CROP CUTTING .....

BGREI being the major sub scheme under RKVY became more successful due to return in higher yield .The potentiality of the product & productivity was properly utilised and Satyabadi block witnessed a major achievement in the above 5 nos. GPs. A farmer becomes happy when he gets his expected crop. After successful implementation of the scheme in the above GPs DRC along with the Local Agriculturists done Post Harvest Assessment of Paddy Cultivation .Accordingly we had done Sample Crop Cutting in 50 no. Patches. Each Crop Cutting patch was an area of 25 Sq. mtrs. (5mtr. & 5 mtr.). During the sample Crop Cutting Programme Agriculture experts like Mr. Sashank Sekhar pattanaik, Sr. Scientist, CRRI, Mr. Bibi Ram Swain, PPO, Puri, Mr. Susil Halder ,DAO, Sakhigopal and Mr. Yudhisthir Pradhan, Secretary DRC were present.



#### MONEYTARY INCENTIVES .....

As per the BGREI Guidelines monetary incentives were distributed among 1028nos. of farmers towards Deep Ploughing and Line Transplantation Activities. A total amount of Rs. 13,75,000/ @ Rs. 1100/per acre was distributed in the form of A/C payee cheque among the above 1028 beneficiaries in presence of the Govt. officials & the local PRI Members with due acknowledgement of the recipients.



#### STEP-4

#### REGULAR MONITORING....

All the programmes undertaken and organised by DRC are regularly monitored by the Chief Functionary. The Programme Coordinator remains sole In-Charge of the Programme for its smooth implementation and Instant Monitoring. Before execution of any programme was planned at DRC level and accordingly staff designed

#### BGREI in Satyabadi Block .....

Satyabadi Block one of the peace loving regions having high fertile land comes under Puri Agriculture Range. The Block consists of total 22nos. of Gram Panchayats and 96 nos. Revenue villages, 10 nos. RI circles, 9nos. of VAW circles, 2nos. of AO circles. The total geographical area of the Block is 15000 Hectors, the total paddy cultivable land 11,244 ha. and Non paddy area is 456 hectors , total high land 2856 hectors, medium land 4190hectars & low land is 4654. Satyabadi Block was selected and identified for implementing the BGREI scheme in the traditional crop lands of its farmers. "Bringing Green Revolution to Eastern India" (BGREI) started in Satyabadi Block in the year 2011-12. Satyabadi Block was taken into account under BGREI implementing one Rain fed Shallow Low land Rice Cluster covering 1000ha during the year2012-13 Kharif with support of Ministry of Agriculture, Govt. of India through direct monitoring of the office of the Deputy Director of Agriculture, Puri Range and the Asst. Agriculture Officer, Satyabadi. Taking the land, irrigation facility and other potentiality of paddy cultivation the Deputy Director of Agriculture, Puri Range has focused the 3 major BGREI components like Block Demonstration, Asset Building and Site Specific programmes.

#### Intervention of DRC .....

In the year 2012-13 DRC was assigned as a programme Partner for carrying out activities under BGREI in Satyabadi block, basically discharging activities in selecting the targeted beneficiaries and Progressive Farmers, motivating the farmers, distributing the inputs among the beneficiaries, Conducting Awareness & Sensitization Programme, Organizing Orientation & Demonstration Activities etc.

As a major partner of the BGREI, DRC has been playing as a catalyst in mainstreaming the local farmers into the BGREI programme of which the very objective is to reduce the gap between the actual and potential productivity of rice in the Block and to promote line sowing /planting for overcoming various stresses , harness input use efficiency and scientific crop management for increased production and building capacity of the farmers through the locally available knowledge with provision and initiation of Modern Technology and Scientific Method. DRC as the Implementing Agency on the above programme has been entrusted upon 5nos. Gram Panchayats, 23villages covering 500 hectors under BGREI during Kharif 2012-13.

#### SECTION -3

#### AREA COVERED

Out of total 22nos. GPs of the block, DRC was assigned with below mentioned 5 nos. GPs. Taking the geographical situation, agronomic character of the land and attitude of the farming community and adhering to the objectives of BGREI the following 5 nos. GPs consisting of 23 nos. villages covered with total 500 hectors/1250 acres of crop land were selected & identified as BGREI GPs. (Ref. Table No-1)

Cluster ID No.	Sl. No.	Name of the G.P.	No. of villages	No. of Beneficiaries	Area (in Acres)
97.3	01	BALAPUR	3	205	250.00
	02	BIDYADHARAPUR	3	229	250.00
97.4	03	KADUA	7	177	250.00
	04	BIRARAMACHANDRAPUR	2	175	250.00
	05	DUGAL	8	242	250.00
<b>TOTAL</b>	<b>5 GP</b>		<b>23 VILLAGES</b>	<b>1028</b>	<b>1250.00</b>



BGREI

BGREI



## OBJECTIVES .....

- Extending Green revolution to areas having less irrigation potential.
- Concurrent attention to soil health treatment, water conservation and preservation of bio-diversity.
- Technology management to enhance productivity and profitability.
- Implementation of programmes considering Agro-climatic factors.
- Attracting educated youth to Agriculture Sector.
- Yield maximization of rice per unit area by improving agronomic practices.
- Focus on Water harvesting and conservation.
- Performance of the Interventions like deep ploughing, Line sowing/ transplanting, application of weedicides, application of micronutrient Zinc, and need based pest control techniques etc.
- Improve seed replacement rate; promote line sowing/ planting coupled with promotion of plant nutrient and plant protection technologies.
- Quality seed recommendation to cover entire area of the unit.
- Changing traditional attitude of and inculcating scientific agronomic practices among the farmers for sustainable scientific crop management.
- Bridge the gap between actual and the potential yield capacity of the paddy crop.
- Reduce the input cost in agriculture.

## MAJOR PROGRAMMES ORGANIZED .....

The above GPs covered under the said programme are being implemented through a series of Programmes like.....

- Selection of the programme Area.
- Mass Awareness Drive, Programme sensitisation & Community Consultations.
- Identification and selection of Potential Farmers and Progressive farmers.
- Farmers' Orientation & Sensitisation.
- Distribution of Inputs.
- Realising through Demonstration.
- Assessment through Sample Crop Cutting.
- Distribution of Incentive Money.
- Monitoring & Evaluation.

## STEP-1

After due recommendation of the Asst. Agriculture Officer, Satyabadi, DRC was selected by DDA, Puri to work under BGREI. Keeping its few years experience, Man Power, Rapport with the local farmers and community DRC acted just as a facilitator in implementing BGREI in Satyabadi Block.

Soon after getting approval of the DDA, Puri DRC convened its GB meeting and Staff Meeting. Details on BGREI was discussed at the Meeting and the Organisation decided to undertake the BGREI activities in Satyabadi Block with systematic approach, following the guidelines stipulated by Ministry of Agriculture, Govt. of India. The Secretary was empowered to undertake the BGREI programme at his level deploying Project Staff and executing all documentary works with the concerned authorities. Accordingly an experienced and efficient Programme Coordinator was recruited for Satyabadi Block.

## PROGRAMME ORIENTATION BY DDA .....

At the first step the Secretary and the Programme Coordinator attended the NGO Orientation Meeting held at office of the DDA-Puri on 10th May 2012. In this Orientation Programme the details on BGREI, its aims & objectives, the activities to be organised, the inputs to be provided, strategies to be adopted, the Role and Responsibility of the Programme Coordinator and the Programme staff, Documentation process, Reporting, Monitoring, Expected Outputs of BGREI etc were some of the major subjects of discussion.

## LAND PREPARATION & NURSERY RAISING .....

All the 1028 farmers had undertaken activities like deep ploughing in their respective land. Each potential farmer had prepared land starting from 50dec. to 5 acre. Nursery beds were prepared and developed by the farmers. Severe infestation of perennial and annual weeds in rain fed fallow land causes a major threat to rice. Besides weeds, the rice insect pests & diseases are causing considerable yield loss to rice productivity:-hence during the land preparation micronutrient fertilizers like Zinc was used by the farmers. Similarly cartap hydrochloride was used for seed treatment.

## TRANSPLANTATION .....

Line Transplanting is one of the easiest Agricultural technologies adopted by the farmers. The young seedlings of 10-15 days old in nursery are carefully transported and transplanted in the targeted lands.



The Line transplanting was put emphasis on Life seedling with seed, roots and soils from the nursery and transplant one plant per hill within 15-30 minutes without plunging the plant in the mud ensuring the roots end not turning upwards. The space was given with spacing of 20X15 cm. to provide adequate space for roots for facilitating nutrient uptake including micro nutrients from a wider soil area, with more space for the predators to move around facilitating biological control of pests. The hand Pushed Cono Weeder were used for 3-4 times to uproot and incorporate the weeds into soil and to increase soil aeration. It is to be remarked that no standing water during growth period, intermittent wetting and drying until panicle initiation was required. After panicle initiation 1-3 cm. of water was kept for about three weeks. About 50% less water was adequate. We had used locally available coir & plastic ropes of 40- 50 ft. length and plastic, fibre straws and pipes to draw the lines for easy line transplanting. Women of the farming and daily wage labor community had taken a major role in line transplanting. Field intervention of the local officials helped a lot in motivating the farmers towards adoption of line transplanting.

## FIELD VISIT .....



BGREI programme undertaken by DRC in Satyabadi Block was highly appreciated both by the farmers, local community, Agriculture experts, Sr. Scientists and High Level Govt. Officials. Hence DRC was fortunate receiving eminent people of our state at its Block Rice Demonstration Unit in different times. On 8th. Sept. 2012 Dr. Aravind Padhee, IAS, the Revenue Divisional Commissioner, (Central Zone), Odisha visited the demonstration field of Mr. Harihar Dixit, a progressive farmer of village Baral under kadua GP and interacted with the said farmer and appreciated the performance. He expressed his heartfelt feelings over the performance of DRC. The DDA & PPO, Puri, DAO, Skl, AAO, Satyabadi and the Project Coordinator of DRC were present during Dr. Padhee's visit.HH. The Technical Team of IMAGE, (one of the premier Agricultural Resource Institutes of OUAT) visited demonstration fields of DRC in Kadua & Balapur GP and appreciated on overall performance of the farmers and the implementing agency.

done as follows.

- ⊙ Acknowledgement of Paddy Seeds from DDA, Puri and distribution among the Potential farmers with the presence of AAO, VAW, Krushak Sathi, Progressive farmers and ATMA staff.
- ⊙ Input Distribution (Zinc, weedicide, cartap hydrochloride, bindas, chorocil)
- ⊙ Land Preparation for Line Sowing and Nursery raising.
- ⊙ Nursery Bed Raising and Treatment.
- ⊙ Distribution of Ropes with marks for Plant Spacing and Stick for Line Spacing.
- ⊙ Line Transplantation at Ground Level by the potential farmers.
- ⊙ Global Positioning System Photograph taken at the field.
- ⊙ Crop Cutting.

### INPUT DISTRIBUTION .....

As part of the Programme we had collected 300 Qntls. of 5 varieties of Paddy Seeds like Puja, Sarala, 1009, RGL & Swarna from DDA, Puri. The same were distributed among 1028 beneficiaries (24kg per one Acre) in presence of AAO, VAW, Krushak Sathi and the ATMA staff at village Muninda. Similarly all the Progressive farmers were provided with one number drum seeder for line sowing and one number Cono weeder for weeding purpose. A power Weeder was provided to a progressive farmer called Mr. Harihar Dixit. (Ref Input Table No. 3).



Sl.No.	Name of the GP	Area In Acres	POOJA (in Qtls)	SARALA (in Qtls)	SWARNA (in Qtls)	CR1009 (in Qtls)	RGL (in Qtls)
01	BALAPUR	250.00	14.34	10.56	22.62	7.56	4.92
02	BIDYADHARAPUR	250.00	16.78	7.50	21.08	7.46	7.18
03	KADUA	250.00	16.85	12.24	22.20	3.91	4.80
04	B. R. C PUR	250.00	12.60	14.40	23.88	2.52	6.60
05	DUGAL	250.00	14.43	6.30	14.32	18.45	6.50
	<b>TOTAL- 5 GPs</b>	<b>1250.00</b>	<b>75.00</b>	<b>51.00</b>	<b>104.10</b>	<b>39.90</b>	<b>0.30</b>

Inputs like Zinc, cartap hydrochloride, weedicide, Bindas, Chorocil and Valydamycin were provided to 1028 nos. of Potential farmers. After Nutrient test of the soil by the Soil Chemist, Bhubaneswar the above pesticides and fertilizers were distributed and used in the demonstration units. Mr. Harihar Barik, the Plant Protection Officer (PPO), Sakhigopal, had extended technical support for best use of the inputs. These inputs were provided as a part of BGREI Incentives for encouraging the farmers. (Ref Input Table No. 4).

Sl.No.	Name of the GP	Area In Acres	Cartap Hydr ocloradide (in kg)	Weedi cide (in ltr)	Zinc (in kg)	Bindas (in kg)	Chorocil (in ltr)	Valyda mycin (in ltr)
01	BALAPUR	250.00	165.000	150.000	2500.000	20.000	62.500	12.500
02	BIDYADHARAPUR	250.00	165.000	150.000	2500.000	20.000	62.500	12.500
03	KADUA	250.00	165.000	150.000	2500.000	20.000	62.500	12.500
04	B. R. C PUR	250.00	165.000	150.000	2500.000	20.000	62.500	12.500
05	DUGAL	250.00	165.000	150.000	2500.000	20.000	62.500	12.500
	<b>TOTAL 5 GPs</b>	<b>1250.00</b>	<b>825.000</b>	<b>750.000</b>	<b>12500.000</b>	<b>100.000</b>	<b>312.500</b>	<b>62.500</b>

### BLOCK LEVEL ORIENTATION, ASSESSMENT & PLANNING .....

Further on 26th May 2012 a Block level Orientation Programme was organised at Satyabadi Block where Mr. Susil Haldar, District Agriculture Officer-Sakhigopal, Mr. Ashok Kumar Das, AAO-Satyabadi, PPO-cum-Nodal Officer - Sakhigopal, All VAWs and all ATMA staff were present. The Secretary of DRC Mr. Yudhishthir Pradhan and the Programme Coordinator had attended the meeting and shared with the Govt. Officials. There was a detailed & elaborative discussion on the existing gap over the potential and actual Rice yield situation of the Block. Many a proposals were unanimously resolved like... Finding out the strategies for Identification of Project Area, Identification of Cluster and Patch area, the way of Community Consultation, Mass Awareness Drive on BGREI, Identification and selection of Progressive farmers and potential farmers, involvement of the local Line Departments, Krushak Sathi, Community Based Organisations, Possible Programme Components contained in BGREI, time frame for each component, Possible Inputs, possible expected outcomes of the Programme etc.

### IDENTIFICATION OF PROGRAMME AREA, TARGET BENEFICIARIES AND APPROACHES .....

After a series of brain storming, review on the overall agricultural activities implemented during the last years, considering the geographical potentiality, nature of the Agricultural Work Force, Possible BGREI Prospective in the proposed area, the Clusters were identified and Programme approaches were finalised.

#### STEP-2

- ⊙ Orientation to GB Members and Approval at organisation level.
- ⊙ Selection of Staff and Programme Orientation.
- ⊙ Informal Visit to the Villages by the Staff of DRC.
- ⊙ Community Consultation,
- ⊙ Farmers Consultation,
- ⊙ Area/Cluster/Patch identification.
- ⊙ Selection of Potential farmers and Progressive farmers
- ⊙ Awareness Generation through Meeting/IEC Materials etc.
- ⊙ Collection of Sample Soil for Micronutrient Test.

### GB MEETING, RECRUITMENT OF STAFF & THEIR ORIENTATION .....

After encouraged, energised and oriented at the Block level Orientation Meeting with active involvement of the District as well as the Block level Officials, Resource Persons, Technocrats and other high dignitaries having expertise in the field of Agriculture, DRC convened its GB Meeting and shared its innovative experience with all its GB Members. After formal approval of its GB Members the Secretary recruited its Programme Staff (12nos.) by the end of May 2012. One day Orientation Programme for its staff was organised at its Project office on 30th May, 2012. Thereafter under the leadership of the Programme Coordinator, Action Plans were developed, responsibilities and targets were fixed, possible strategies were discussed and Staffs were moved to work in the field.

### SELECTION OF THE PROGRAMME AREA .....

During the initial period the Staff of DRC visited all the villages in their respective Cluster and made instant community consultations through formal and Informal meetings. After a series of Visit and several rounds of Community consultations with various cross sections of People basically the farming community living in the said villages the geographical were identified in the form of Cluster /patch. We are fortunate in identifying one Cluster in our area.

### DRC FOCUSED ON 500 Ha ..... ONE UNIT

As per the guideline each block consisting of 1000 ha can be taken as a Cluster. Accordingly 1000 hectares were identified as Paddy Cluster and two nos. NGOs were identified to carry out BGREI activities each having

500 ha. This 500ha. was called a unit. DRC was given responsibility by DDA to implement the BGREI programme in one Unit having 5 nos. GPs namely Balapur, Bidhyadharpur, Kadua, Bira Rmachandrapur & Dugal. The 5 nos. GPs were again divided into 5 patches. Each patch is having 100 hectares. The total potential farmers identified for the above 5 nos. patches were 1028 nos.

### MASS AWARENESS DRIVE, PROGRAMME SENSITIZATION AND COMMUNITY CONSULTATIONS .....

Information is knowledge & Knowledge is power. Hence knowledge on Agriculture for Farmers is necessary. The very important part of the BGREI programme is mass awareness generation and sensitisation on BGREI and its objectives. DRC being a grass-roots organisation is having long experience in conducting awareness generation programmes on various issues. In this backdrop DRC took the help of the local Krushak Sathi, VAWs, AAO, ATMA Staff and local CBOs in uniting the people at village level. In all the 5 GPs we had organised Community Consultations Meetings and mass awareness generation programmes, sensitisation activities. Detailed programmes were on BGREI, its aims & objectives, the potential and the actual yield capacity of their product & productivity, inputs available at free of cost from Govt., role & responsibility of the potential farmers & progressive farmers etc. The Potential Farmers and the Progressive Farmers were sensitised towards their involvement in maximum utilisation of their existing Land, Water, Soil and manpower resources and above all mainstreaming the agriculture with development process. We have been keeping bird's eye view while organising Awareness Generation and Sensitisation Programmes meant for the Potential Farmers. As major component of the programme we have organised 11 nos. Awareness and Sensitisation Meetings in different locations of the area with participation of 602 nos. of Potential as well as the Progressive farmers. Resource persons highlighted the major aims & objectives of BGREI, the gap and the potential Rice Production in the area, Micronutrient Contents of their soil, need of Modern technology, Change in traditional agricultural practices, Various facilities available at Govt. and other level for agricultural development through a number of Agricultural Schemes, Projects, Laws, Acts, Guidelines etc. People were mobilised for soil test to know the Micronutrient contents of their soil. IEC Materials collected from Agricultural Sources /Govt. Office & Websites were distributed during the awareness campaign. (Ref. Table no.2).



### PARTICIPATORY APPROACH IN SELECTION OF PROGRESSIVE FARMERS .....

In our Unit Potential Farmers and Progressive Farmers were selected through participatory approach. Taking the Agricultural Practices, Agricultural History, their Integrity towards development of agriculture, attitude towards Agricultural development and allied practices, interest in change in existing agricultural practices and methods, willingness for increase in the existing rice production through agronomic practices, apathy towards agriculture and agricultural people, farming community, having leadership quality etc Potential farmers and the Progressive farmers were identified and selected. The above progressive and potential farmers were selected at village Meetings through participation of the people of the concerned villages. During the selection period representatives from Dept. of Agriculture like AAO,



VAW, ATMA staffs, Krushak Sathi, PRI Members, and CBOs etc were present. The whole selection process was transparent and participatory in nature. (Ref. Table no.2).

Separate lists of the Potential Farmers and Progressive Farmers were prepared and submitted to the Govt. through the Local Govt. Officials.

Sl.No.	Name of the programme / activities	Date	Venue	No. Of Participants attended
01.	FARMERS AWARENESS PROGRAMME ON BGREI	02-06-2012	MUNINDA	105
02.	-- DO --	02-06-2012	BALAPUR	85
03.	-- DO --	04-06-2012	TALAPATANA	38
04.	-- DO --	04-06-2012	CHANAGORADA	22
05.	-- DO --	04-06-2012	BHATTAPUR	23
06.	-- DO --	05-06-2012	BIDYADHARPUR	98
07.	-- DO --	08-06-2012	ATMA OFFICE, SAKHIGOPAL	64
08.	-- DO --	10-06-2012	SADANANDAPUR	34
09.	-- DO --	11-06-2012	DUGAL	66
10.	-- DO --	12-06-2012	MULAALASA	36
11.	-- DO --	13-06-2012	KADUA	31
<b>TOTAL</b>	<b>11 NOS. OF MEETINGS</b>			<b>602</b>

### SAMPLE SOIL FOR MICRO MICRONUTRIENT TESTS .....

Before any agricultural intervention in a particular soil, testing of its quality and assessing its micronutrient status is badly required. Based on its nutrient status soils are treated accordingly. Soil Testing has become a Community Revolution to our time. In order to make the BGREI most successful in our area we put priority in Soil Testing. Accordingly Sample soils were collected from 50 nos. potential farmers and were sent to the Soil Chemist, Bhubaneswar for Micronutrient Test. The Tested Soil reports were discussed and critically analysed in all these sensitisation meetings. After the clinical test, the Soil Scientists had recommend their report to the office of the DDA and prescribed for further input to normalise the soil.

### STEP-3

### DEMONSTRATION .....

The objective of the demonstration is to improve seed replacement rate, promote line sowing/ planting coupled with promotion of plant nutrient and plant protection technologies. Quality seed recommended for the area would be promoted to cover entire area of the unit. Every farmer in these units would be encouraged to take up at least 0.40 hectares under hybrid rice. In case of rice identified progressive farmers for a set of 100 hectares each, will be provided two drum seeders free of cost which will be used for facilitating the sowing of rice lines by all the farmers included in the unit. It is expected that concept of custom hiring in the area would be popularized while at the same time it would give additional incentive to the identified progressive farmers for coordinating various implementation activities.

Since DRC was assigned for 500 ha. Land under BGREI hence progressive farmers were provided with 1 drum seeder each. The whole demonstration activities were

