Proceedings

Virtual Workshop on CSR for Agricultural Development: Successful Agricultural Projects Replication and Upscaling



Centre for Climate Change and Adaptation (CCA)

National Institute of Agricultural Extension Management (MANAGE) Hyderabad, India (An Organisation under the Ministry of Agriculture and Farmers Welfare, Gol)

About the Publication

This publication is the outcome of the Virtual Workshop of CSR for Agricultural Development: Successful Agricultural Projects Replication and Upscaling conducted on 24.09.2020 by MANAGE and BIMTECH.

Inside Publication

This publication has summarized the key points of the panellists who have presented in the Workshop. It also highlighted the success criteria of some of the agricultural projects so as to emulate and implement them at scale.

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Virtual Workshop on CSR for Agricultural Development: Successful Agricultural Projects Replication and Upscaling



Background

MANAGE in collaboration with BIMTECH has been organising a series of Workshops on CSR for Agricultural Development since 2017. This year as well (2020), the workshop was organised on a virtual mode through Zoom Platform on 24.09.2020 as physical Workshop could not be conducted due to COVID-19 pandemic. The objectives of the workshop are to ensure the substantial flow of CSR funds for agricultural development as most of the CSR funds are spent for health and sanitation, education and other livelihood development sectors. Also, the distribution of the funds for agricultural development within the country is highly skewed towards richer states, for example, the states like Maharashtra get higher CSR fund flow and poorer states get lesser CSR funds. However, most of the corporates have developed several successful agricultural projects that have the potential to ensure the better livelihood of farmers. The purpose of this year workshop is to identify the game-changing innovations, agricultural projects, ideas etc. The outcome of the workshop may help the policymakers to understand the success criteria of the different agricultural projects implemented by corporates and also help the development sectors and firms including government to design and implement the successful projects at scale.



Speakers and presenters

Around 10 panellists who have rich experiences in implementation of successful agricultural projects and CSR activities have presented in the workshop and provided an insight for replication and upcycling them.



Who has participated?

Around 784 were participated in the Workshop belonging to different fields such as Scientists, Extension Officials, Development Functionaries, Research Scholars and other officials from government and non-government organisations who are associated with projects related to agriculture and allied sectors.



Moderator

The Workshop was moderated by N Balasubramani, Director, CCA, MANAGE.

The highlights of the presentation are as follows



Ravindra Pastor E-fasal (IAS) Founder, E-FASAL

'E-Fasal – a disruptive technology for inclusive growth in Agriculture'



Highlights

As most of the farmers are marginal and small in India, their input requirement for the cultivation of crops is less and the cost of inputs is more. However, when they sell the farm produce, they are not getting more profit due to less marketable surplus at individual level.

There are crops wise clusters in India. For example, in Madhya Pradesh 42, 000 ha of lands are under potato and 22,000 ha are under chillies, 35,000 ha for onion etc. These clusters were developed according to the market demand. However, farmers buy the inputs individually to grow the crops.

To avoid the individual farmer buying the inputs and to reduce the cost of production, producer organisation can be encouraged in the form of Cooperatives, Farmers Producers Organisations, Farmers Clubs etc.

It is in this background e-FASAL (electronic Farming Solution Associate Limited) was launched in 2007 as a registered body. This is a franchise model, where players are identified and the association is made with several stakeholders for supplying seeds, feeds, fertilisers, pesticides, bio fertilisers etc. As of now e-FASAI has about 185 companies in Madhya Pradesh and are responsible for supplying the inputs on a cluster basis. This will ensure the supplying of cost effective inputs.

Also, it enables the groups/collective farming to establish link directly with manufactures, processors and exporters. The price is negotiated with the manufacturers for supplying to these franchises. The partnership is also made with the processors and exporters, hence the farmers can sell the produce directly to them collectively through franchises.



The success criteria of E-Fasal

The success criteria of e-Fasal can be attributed to the development of the uniform package of practices for a commodity on a cluster basis through a Collection cum Distribution Centre. Around 300-400 farmers are linked to each Centre. These centres are responsible for collecting the input demand from the farmers and sell the inputs. The most critical success factor of this e-FASAl is promoting commodity-based groups and uniform package of practices for each commodity. This approach solves not only the problems of high-cost of inputs but also create more demand for farm produce due to uniform quality and thus, making agriculture a profitable venture.



Harsh Singh (Indian Economic Service, senior advisor to UNDP)

'Navaodhya model and Disha Project - for agricultural development'



Highlights

The number of landless people is high in Rural Bihar, hence, the access to assets, credit, rural livelihood opportunities etc., are also less. Because of this, 2 out of 3 potential rural people are migrating to cities. Hence, their earnings are just meeting the basic needs and not translating into investment. Most of the rural youth are willing to go to cities but they do not show any interest in farming nor to become an artisan.

In northern Bihar, urbanisation is slow (only 7 to 8% are urbanised) where people from rural areas to migrate for better livelihood options nor agriculture supports the entire population for their livelihoods as it is not flourished much. Hence, there is a need for diversification of livelihood options.

Agriculture is not just a sectoral agenda but should be a visionary agenda. The development should focus on the Triple bottom line of common man viz., access to asset, human development services and livelihood opportunities emerging out of these.

In Navodaya Shahar Model, the development of home and garden blocks is encouraged among rural households. This is promoted on a cluster basis by covering around 500 households.

In Disha project, the focus is on creating efficient FPOs, improve the managerial capacity of rural women in the entire value chain, the efficient functioning of FPOs. These FPOs should create livelihood opportunities for women and youth.



Success criteria of these projects

Establishment of a cluster based home and garden blocks on Navodaya Shahar Model to ensure food and nutritional security. Involvement of women in the entire value chain by reorienting their skilling to enable them aspire for higher job roles. Also addressing the triple bottom lines of common man in an integrated approach.



Siraj Hussain (IAS)Former Secretary, Gol and Visiting Senior Fellow, ICRIER

'Interventions of Corporates for Agricultural Development'



Highlights

Agriculture has done better than other sectors in the COVID-19 crisis and during the lockdown. Though there were reports on farm gate price crash, several initiatives of the government helped farmers avoid the income loss to some extent.

Reports suggest that among 130 companies in India, 80% of the Companies spend their CSR funds in the development sector including agriculture.

For example, HDFC banks initiative on soil and water conservation has been highly successful. Around 93 crores were invested in this initiative. Also, the Bank of Maharashtra has invested in Soil conservation to benefit the farming community.

Most of the companies have come with several good projects and reaching out to farmers and are benefiting the farmers. For example, Tata Institute of Research Project (TIRP)' in Kullu and Shimla of Himachal Pradesh state aimed at improving the skills of Apple farmer on water conservation, good practices and better seed management, etc. Similarly, the Seed the Rise project of Mahindra and Mahindra have tremendously increased the seed management of farmers. However, most of the success stories are not documented. This may be done to capture the successful agricultural models of CSR projects.

However, CSR funds in agriculture have not efficiently developed much-needed skills of farmers in better cultivation of crops to improve the environment and sustainability. Also, in the year 2020, most of the companies spent their CSR funds towards PM CARES fund due to COVID-19 pandemic. Therefore, their investment in agriculture in the coming year maybe less.



Ganesh NeelamExecutive Director, Collectives for Integrated Livelihood Initiatives

'Lakpathy Kisan Model'



Highlights

Lakpathy Kisan Model (Lakpathy Kisan Smart Model) was started in April 2015, the idea came from Shri Ratan Tata, who inspired the team to move away from incremental changes to impactful changes. The major idea behind this model is to identify the changes or aspirations that the community needs, especially the tribal communities of central India, not the incremental needs (e.g. just only focusing on the income without concentrating on local community needs).

When the team started assessing the aspiration or the needs of the triable communities, their basic need was to get Rs.15,000 a month as income. Therefore, to focus on the increasing income of the tribal communities, 1,00,000-1,50,000 per year.

The Lakpathy Kisan Model was developed and the initially the model covered about 1,00,000 tribal communities of Jharkhand, Orissa, Gujarat and Maharashtra. This model covers those blocks which have more than 50% of the tribal population in the selected states.

The basis four principles of this model are (i) the community (community-centric programme with women being at the centre), (ii) demand-led programme (demand of the community where the communities have to contribute both technically and financially), (iii) market-driven and (iv) innovative driven.

The model concentres on food crops and high value horticultural crops of the tribal geographies (cluster) that have better market demand. Also, small ruminants and non-timber products have been included as a major system for increasing income.

This integrated agriculture with livestock and non-timber produce helps to avoid risks and uncertainties, and provide a substantial income anywhere around Rs.1,30,000 to 1,40,000/-per year.

By seeing the success of this integrated approach, the government of Maharashtra has come in support of this project to scale up in Chandrapur district.



Sunil ShrivastavaHead, Water security (Reliance Foundation)

'Scalable Innovative Water harvesting Solutions – Importance and impacts'



Highlights

Today's world requires a scalable innovative water harvesting solutions to address the looming water crisis.

Any intervention in water harvesting is an important aspect. One of the most important innovations of the Reliance Foundation is water harvesting solutions. As frequent droughts and floods affect agriculture, most of the farmers migrate to cities in search of better livelihoods. To avoid this situation, Reliance Foundation has come up with water harvesting solutions with better technology, process, simplicity and affordability. Some of the successful water harvesting technology interventions are (i) Holiya Intervention at Patan district (Gujarat state) wherein a 40 feet pit is dug and the water is stored during heavy flood and it can be used during drought periods. The construction of Holiya is not more than Rs.10,000 thus the farmers are able to afford this.

The other water harvesting solution introduced by Reliance Foundation is (ii) Ferro cement: water tanks construction (in Uttarakhand state) where the thickness of water tanks is 2 to 4 inches, whereas, in normal water tank construction, the thickness is about 6 to 8 inches. Also, the cost of construction is less in this technology.



Success Criteria

The success criteria of these water harvesting innovations can be attributed to better technology, affordability, better process and simple technology and involvement of the community.



Nan Khaing Sandar Lwin Finance lead, proximity designs, Myanmar

'Proximity Designs – A social business for the impactful agriculture'



Highlights

Small farms, big ideas is the philosophy behind the Proximity Designs.

Proximity Designs is a social business and has been working with farmers for their betterment since 2004. As most of the farmers are small farm families in Myanmar (around 5 million) and 85% of the people live in a rural area with high poverty.

The major aim of the Proximity Designs is to help low income and vulnerable families in rural areas and improve their livelihoods. The services are offered under three major segments namely farm technologies, agronomic practices and farm finance, with which they offer knowledge and advisory services on precision irrigation (drip, sprinkler and mist technology), seeds and planting (Best fit technology, on-call, Soil test health and Trichoderma), nutrient management, crop protection and farm finance (crop, livestock and enterprise loans).

The success factors behind the Proximity Design are due to the adoption of multichannel delivery systems with three-dimension approaches (i) Direct transfer where it engages 700 field level staff and 400 independent village level entrepreneurs to generate ideas, sell and deliver the products and provide after-sale advisory services, (ii) the identified 270 input shop dealers sell the technologies and products and (iii) Digital delivery of advisory services, marketing services at a lower cost. Also, it is making use of Facebook chat, tutorial videos, tele advises on farmer queries on pests, diseases attacks via phone calls or messengers.



Gyan Prakash RaiConsultant, International Water Management Institute (IWMI)

'Solar irrigation pumps and India's water-energy livelihood nexus'



Highlights

Groundwater is declining at a rapid rate. Also, most of the farmers use diesel engines for pumping the water. This may lead to the consumption of more energy and wastage of power. It is in this scenario, IWMI-Tata Water Policy Program (ITP) led smart solar irrigation field piloted two solar-powered innovations in agriculture namely: (i) Solar Power as Remunerative Crop (SPaRC) in western parts of India and (ii) Solar Irrigation Service Providers (sISP) in eastern part of India.

SPaRC where around 9 farmers with 5.0 to 10.8 kWp solar pumps are connected through a microgrid. Around 30-35 % of the energy is consumed for irrigation and the rest is transmitted to the grids and these nine farmers earn an additional income of Rs. 16,00,000 per year by selling the solar power. These incentives help farmers become more energy efficient. At present, around 3,500 farmers are covered under this project with the state government of Gujarat.

sISP has experimented at Chakaji village in Samsthipur district of Bihar where farmers invest more on diesel engines. Under SISP, the cost of irrigation is less and one-third of the cost of diesel engine cost, etc. However, farmers face challenges such as maintenance of the solar system and no financial assistance.

Success factors of these solar irrigation pumps can be attributed to the buy back arrangement with power distribution companies for a longer period with fixed agreed price Feed in Tariff (FiT); coupled with green energy and water conservation bonus have increased the irrigation efficiency and minimise the water exploitation, reduce the burden on the public exchequer on providing subsidised power.



Avinash Upadhyay Director, Digital Green

'Digital Green – A digital solution for all the farm problems'



Highlights

Digital Green was introduced as a Microsoft pilot initiatives in India. It is a community-based approach where three to four farmers are identified as local video producers and the local community members are made as actors in this video.

Further, the Digital Green uses the Pico projector (a pocket-size projecting device). The data are gathered and stored for further uses. As of now, 15,000 front line workers have been trained and videos of green digital are seen by more than 60 million people.

The process adopted for video production is (i) training the community on video production, (ii) dissemination, (iii) question and answer and (iv) data management and (v) review. The above five-step processes help the Digital Green team to remain distinct in their areas and model for others to replicate and scale-up.

The success can be attributed to the partnership made with farmers, the existing government, NGOs, National Rural Livelihood Mission (NRLM), Departments of Agriculture and other departments in the country and abroad and other partners.

Farmers are the centre of the successful implementation and scaling up.



M PrabhakarDirector, Digital Green

(Principal Investigator), National Innovations on Climate Resilient Agriculture (NICRA), CRIDA



Highlights

NICRA has been implemented in 151 villages with the four major components namely Research, demonstration, capacity building and sponsored/competitive Grants. Through this project, a representative village is selected from 151 districts based on climate vulnerability. Suitable technologies to address these vulnerabilities are screened and demonstrated to the farmers through KVKs.

NICRA is an integrated approach for climate smart agriculture, where NICRA focuses on not only crops but also livestock, fisheries and other components of agriculture. Village-level institutions are established and are responsible for maintaining seed banks, fodder banks and Custom Hiring Centres (CHC).

The success criteria of this project are attributed to demonstration of crop-specific and farm-specific technologies by multi-disciplinary team to help farmers to adapt effectively to climate change. The technology coupled with effective extension services based on the district specific contingency plan has helped NICRA to be a successful Climate Smart Initiative in the country.



N RavishankarPrincipal Scientist (Agronomy), ICAR-India Institute of Farming System Research (IIFSR)

'Integrated Farming System (IFS) - A way to sustainable agriculture'



Highlights

Integrated Farming System –Models and clusters of the Indian Institute of Farming System Research (IIFSR) can ensure sustainable agriculture and to provide a better income to farmers.

Though the ancestors followed by IFS in the past, yet over a period, farmers have started adopting mono-cropping system due to dwindling resources. However, this trend is now being reversed where farmers are moving towards crops by integrating with other livelihood systems namely livestock.

IIFSR has developed around 60 IFS models with the help of other research institutes that are suitable for 26 state agroecosystem. These models can also be used by the corporates and scale up by integrating with CSR activities. Corporates can spend CSR funds to train the farmers on these models and can contribute to the enhanced income of farm families.

It has several benefits and co-benefits as it leads to a reduction of expenditure on input purchase, increases water productivity, creates employment opportunities throughout the year, etc. Also, recycling of resources in the IFS model results in the on-farm generation of nutrients.

The IFS model is one of the best interventions as far as climate smart agriculture is concerned. It has the capacity of achieving 13 Sustainable Development Goals (SDGs), thereby empowering the farmers both economically and sustainably.

Recommendations emerged from the workshop

- Projects in agriculture must include access to asset, human development services, and livelihood opportunities and also, the entire value chain of agriculture to ensure sustainable development in agriculture.
- Agricultural projects have to give more emphasis for community-centric, demand-driven, market-driven and innovative activities by integrating farming system approach to generate substantial income of farmers.
- Need to promote farmers groups and collective farming and link them directly with manufactures, processors and exporters similar to franchise model like e-FASAL (electronic Farming Solution Associate Limited) and other successful models. As water and electricity continue to be the critical components of agriculture in the context of climate change, farmers need to adopt scalable and Innovative technologies for effective conservation and use of water (e.g. Holiya Intervention and Ferro cement: water tanks) and adopt clean and renewable energy solutions for various farm operations (e.g. Solar Power as Remunerative Crop (SPaRC)). Many such agricultural projects should be designed and implemented by involvement of the community and supported with simple and cost effective technologies.
- Agricultural development projects may also think of adopting multi-channel delivery systems such as direct transfer, transfer through trained service providers and digital advisory services.
- Development of participatory videos can be encouraged in project mode to document the good practices of agriculture and disseminate with the help of local NGOs, CSOs, Govt. departments, etc.
- Many agricultural projects such as NICRA, Integrated Farming System projects etc., have demonstrated in addressing the issues of climate change and enhancing the income of the farmers, Such successful agricultural projects may be identified and documented. Corporates and private firms may adopt these successful projects and replicate in different parts of the country.

Conclusion

The outcome of the presentation shows that corporates through their CSR funds have innovated and implemented several agricultural projects. These projects have the potential to not only support the livelihood of farm families but also equally capable of restoring the agroecosystem, augment the natural resources and economic development at the project sites. Therefore, there is a need for enabling policy environment and funding options for other agricultural stakeholders to emulate, implement and upscale these innovative projects. Further, a convergence platform needs to be promoted to foster an effective partnership between public sectors and corporates in process of upscaling.



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