

Sub working group: Optimised Solutions

under

CII Climate Change Council: 2020-21

Alliance for Sustainable Agriculture

Scope of the sub-group

This sub-group will work towards identifying solutions at farm level in the areas of mechanisation, water efficiency, soil health and integrated pest management to reduce greenhouse gases and build climate resilience across agriculture sector.

Objective of the sub-group

To identify sustainable and climate resilient solutions at farm level to increase productivity and efficiency of good agricultural practices.

Prioritised Areas of the sub-group

1. Water conservation & efficient use (irrigated and groundwater)
2. Integrated Pest Management
3. Mechanisation to reduce climate challenges, attract youth and reduce over employment in agriculture sector
4. Soil health, conservation & management

Sub-group Activity

- Members to share their successful case studies related to the prioritized areas in the format attached below-Annexure. Last date of submission for the case study: 31 January, 2021.
- Identify key policy interventions required to promote and support sustainable & climate smart practices at agriculture level.
- Draft a policy paper with reference to case study learning and suggesting policy interventions to address present and future challenges.
- Submission of policy paper to CII's Climate Change Council for inputs and suggestions on further action.

Annexure: Format for Case Studies (2 pages) Last date of submission: 31 January 2021

Priority Area	Koutla-B MACTS provides the services to their members in the following areas: <ol style="list-style-type: none"> 1. Quality Agri Inputs (Seeds, Fertilizers, Crop Protection, Post-harvest storage solutions) 2. Farm Machinery 3. Output Market Linkages 4. Exploring Cashless Credit to Farmers 5. Social Security Services 6. Safe Drinking Water
Name of Project	Koutla-B MACTS (Farmer Producer Organization)



Location	Koutla-B Village, Nirmal district, Telangana
Coverage & Specifics (high level) (i.e. savings, impacted areas etc.)	<p>Coverage: It serves Koutla-B Village and nearby 10 villages. It has 100 members (81 shareholders – 19 members are non-shareholders) in the Koutla-B MACTS. Serving an extent of 3500 acres of agriculture land covered by diversified crops such as Cotton, Paddy, Maize, Soybean and Turmeric etc.</p> <p>Impact:</p> <ul style="list-style-type: none"> • 9 more FPOs (Sarangapur, Jowli, Beeravelli, Swarna, Budholi, Ola, Narsapur (G), Pambi and Jabithapur) were established in Nirmal District with Koutla B MACTS inspiration. • They have 2-3 young people employed for accounting and sales purpose. The founding farmers were very young (below the age of 31 years) when this MACTS was formed in 2003. Young people in the village are getting motivated day by day after seeing the opportunities in the agricultural field and the MACTS.
Vision envisaged	<ul style="list-style-type: none"> • A supermarket is being established locally by the organization, to benefit both the nearby village consumers and the farmers, where they can sell their produce. Items of daily needs like oil, maize, sugar etc. will be supplied through the supermarket and these products would be sold at lower prices to the consumers with better quality. <p>The actual reason that made this organization to proceed with their own supermarket is that, they came to know that fake oil is being sold with brand names on it and this made them realise to come up with right products for the villagers by facilitating with the products that this MACTS has access to. They are trying to collaborate with authentic players of the industry so that best quality produce can reach the villagers.</p> <ul style="list-style-type: none"> • They don't have a warehouse but they are planning to establish one, in the coming 6 months
Key Partner Agencies	<ul style="list-style-type: none"> • Initially, BASIX provided the technical and financial assistance. • Since 2019, SAVE Foundation providing assistance in social & networking activities, output market linkages, advisory services and branding.
Description of the project	<p>Koutla- B is a FPO registered as Mutually Aided Cooperative Thrift and Credit Society Ltd (MACTS) on 12-Jun-2003, in Koutla B village, Nirmal District of Telangana. At present it has 100+ farmers' members cultivating Cotton, Maize, Turmeric, Soy Bean and Paddy crops. Mr. Vanga Rama Reddy was the Founding President and served till 2018. During June 2005, The Koutla B MACTS President was felicitated by India's President Dr. APJ Abdul Kalam through Jamsetji TATA National Virtual Academy Fellowship program supported by MS Swaminathan Foundation for their good contributions through FPO. Since 2018, Mr. Nakireddy Narsa Reddy is the President of the FPO. All though the existing of the Koutla-B and its success story goes dates back to the existence of SAVE Foundation, but its formation, progress of input business and out-put market linkages were done by the Founder of</p>



	<p>SAVE Foundation (www.savefoundation.in) and his team while they were with BASIX (www.basixindia.com) a Social Enterprise Group. KOUTLA-B is serving to the farmer base to the extent of 3500 acreage as on date.</p> <p>The Koutla-B FPO was formed in 2003 and its success resulted in around Rs. 4-6 crores annual turnover by them and inspired another 9 FPOs in Nirmal District which are running successfully mainly focused on input business. Today Koutla-B MACTS has its members share value stood at Rs. 480,000/- per member which was of Rs. 1000/- per member in 2003. Koutla-B FPO again partnered with SAVE Foundation on 1st July 2020 to get its advisory services under “Institutional Development Services for Markets Inclusion”. Technology access, Branding and Enhanced Market Linkages for Food Processing Industries have been among the top identified areas of cooperation in this MoU.</p> <p>Koutla B has owned premises from where currently it is running its operations for supplying of Agri Inputs, Farm Implements, RO Water distribution etc. They have bought One Acre land in which now they are constructing a building to setup a Super Market, a Bank and the backyard will have a huge community hall for the gathering of farmers around that region to attend capacity building workshops for knowledge sharing and to enable exposure visits.</p>
Key achievements	<ul style="list-style-type: none"> • Their annual turnover is Rs. 4-6 crores. • Today, the members share value is Rs. 480,000/- per member which was of Rs. 1000/- per member in 2003. • They were felicitated by former president Dr. A.P. J. Abdul Kalam, in their initial two years • Koutla-B MACTS provides every Agri-input (crop nutrition, crop protection, seeds) whatever their farmer members are in need of. They provide it not only to their members but also to other farmers of the village, saving around 10% of input price of the farmers per crop cycle. This helps to avoid the fake inputs that other farmers generally face in the outside markets. Quality, safe, inputs (also bio manures) at the right time and at optimum quantity helps to maintain the soil health. • Tarpaulin water proof sheets were distributed among member farmers and other farmers during lockdown (Covid-19), to protect the crops from the rain. The sheets were worth Rs. 50 lakhs and were given at 50% less price compared to their market price thus saving 50% money of the farmers. • They provide a very noble service of giving Rs. 1 lakh as ex-gratia to the family of their deceased members. They started it in the year 2020 itself. Some financial assistance is provided to school children by MACTS. • They have Provided 80 mobile operated pump starters that helps in maintaining water efficiency as part of smart irrigation practices. By using these starters, they are saving 4-5 hrs electricity comparing to the general practices and 40 percent farmers are using drip irrigation (major crops for drip are Watermelon, turmeric, maize) • The MACTS has sourced customized machinery from Maharashtra, which they are using for turmeric and maize.

	<ul style="list-style-type: none"> • 50% biological products they are using in their total unput usage. • Mineral water plant is established in the rural village by this organization with the support of the govt and thus provides hygienic drinking water to rural people by charging a mere Rs. 16/- per month per person.
Challenges encountered & problems resolved	<ul style="list-style-type: none"> • Initially BASIX trained a small group in Nirmal district on IPM, to reduce the use of chemical pesticides. Due to this farmer saved Rs 10,000/acre. This success gave them the confidence to start this MACTS and this how Koutla-B MACTS was formed. • Lack of regulated markets, price fluctuations, no warehouse, cold storage • They are constructing a warehouse for themselves, will be ready in the coming 6 months
Challenges envisaged for pan-India scale up	<ul style="list-style-type: none"> • Committed CEO and BODs, towards their FPO • Quality human resources from the associated institutions (extension and capacity building services etc.) • The stakeholders who provide the needed services like inputs, post-harvest solutions etc. should be genuine and credible. • Suitable logistics and technology platforms.
Policy gaps and challenges	<ul style="list-style-type: none"> • Farmers are seeking right price for their produce in the form of minimum support price and not just some supporting schemes like Raithubandhu. • Farmers should get the price according to the MSP, that is announced by the government every season. • Market linkages can be improved with regulated markets and credible contract farming initiatives. • Training is required for better Agricultural production and marketing. • Extension services should reach the farmers at the ground level using technology. • Exploration of Carbon Credits market for sustainable agriculture practitioners.
Any other relevant information	<ul style="list-style-type: none"> • Not depended on subsidies. • Built on strong financial discipline and cooperative mechanism in place for innovation and sustainability. • Key importance for credible partnerships.