Sustainable Development Goals (SDGs) and Role of Primary Agriculture Credit Society (PACS)

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Abstract

Implementation of Sustainable Development Goals (SDGs) through Primary Agriculture Credit Societies is a strategic model which will help enhance the effectiveness of implementing the SDGs right at the rural level.

This paper aims to understand how cooperatives have made deviations in their objectives to adopt SDGs in their own way. In India, where there is a dense network of PACS has paramount scope for an avid futuristic sustainability model which can be implemented through these PACS. In order to understand this implementation, one needs to understand the various existing models of cooperatives that have implemented such strategic offshoots and the scope of SDGS which can be adopted and implemented through the PACS architecture. These models and scope have been sufficiently discussed in this paper.

PACS is a financial cooperative, hence the same can be the most efficient organization to achieve SDGs in rural settings.

Today, sustainability needs to be treated at the rural end as the crux lies in a sustainable sowing pattern which includes quality use of fertilizers and water management. In Indian rural agriculture, there have always been many ill practices such as, overuse of fertilizers and pesticides, ill-rotation of crops, inefficient use of water etc. This has not only hampered the productivity of the soil but also has led to water contamination and resultant ill-health of the consumers due to contamination, further leading to climate change. Rampant rise of cancer related disease in Punjab and Haryana is not a new story. On the other hand, poverty amongst the farmers due to inefficient resource management and weak information system on efficient farming methods are the other impediments. Thus, we observe that SDGs 1,2,3,4,5,6,7,8,9,12, and 15 need to be urgently put into practice. And there is no better organization than PACS to conduct their implementation. As PACS will work as not only a machinery to disseminate information regarding SDGs but at the same time will enhance effective implementation of these goals.

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Thus, there is an urgent need to educate the farmer community about the SDGs which will help cultivate a culture of sustainable farming and what better could it be if the same is disbursed through credit providing agencies as there would be more motivation to cultivate this attitude.

This can be more effectively achieved through the PACS network. We thus understand which of the SDGs can be targeted and the various strategies to work towards their implementation.

Keywords : Sustainable Development Goals (SDGs), Primary Agriculture Credit Society (PACS), Cooperatives, ILO (International Labor Organisation), sustainability, climate change, rural.

Introduction

It is not strange that the agenda of sustainable development has been a common goal on the world map and there have been sustained efforts to make a common effort to achieve this goal.

The Sustainable Development Summit took place on 25th September, 2015 and the UN Member States adopted the 2030 Agenda for Sustainable Development, which includes a set of 17 Sustainable Development Goals (SDGs) to end poverty, fight inequality and injustice, and tackle climate change by 2030.

Indian agriculture sector contributes 50% to the Indian GDP. However, in a race to achieve productivity, principles of sustainability have to a large extent been hampered. Higher productivity plays a crucial role in a farmer’s income. Thus, if a farmer needs to be convinced about sustainability then it can be done only through a responsible organization which can assure the farmer about the importance of sustainability.

Articulately, sustainable development propitiates the rural areas. Ground level implementation of SDGs finds more relevance especially, in an existing scenario of rural migration to urban areas where the same helps proliferation.

At the same time, PACS is a credit lending cooperative organization. And credit plays an important role in funding farm activities. Thus, PACS has more impact on employing rural credit charged with options of sustainability which mandate the farming community to follow and implement.

Savings and credit cooperatives (SACCOs) or PACS in Indian context facilitate their members’ access to financial capital, while agricultural cooperatives help farmers access the inputs required to grow crops and keep livestock and help them process and market their produce. Such services ultimately help members to improve their living conditions, thereby helping to reduce poverty.
Primary Agriculture Credit Societies which have been set up in the rural areas for the purpose of agricultural credit have a wide connectivity in the rural areas and are the backbone of the rural financial system. They have more chance to effectively promote SDGs due to their constitution to provide credit to the last segment of the society.

PACS have been successful to a certain extent to eliminate issues of money lenders and help the farmer seek quality and quantitative credit. These societies cover about 90% of 5.8 lakh (approx) villages in India. Their membership of 9 crores covers about 65% of the total estimated population of about 14 crores of rural households. At the same time, more than half of members of PACS are small farmers, agricultural laborers, rural artisans etc.

Presently, Cooperative Banks Short Term Cooperative Credit Structure Network has coverage through its 92,432 Primary Agricultural Credit Societies (PACS) as a part of 32 State Cooperative Banks (STCBs), 370 District Central Cooperative Banks (DCCBs) functioning through their 1038 and 1331 branches and 697 Primary Cooperative Agriculture and Rural Development Banks (PCARDBs) and 20 State Cooperative Agriculture and Rural Development Banks (SCARDBs) having 1475 and 823 branches.

Understanding the growing importance of PACS the Government of India has also sanctioned Rs. 2,000 crores (US$ 306.29 million) for computerization of Primary Agricultural Credit Society (PACS) to ensure cooperatives are benefitted through digital technology and promote sustainability.

It is due to the deep thrust of PACS in rural India with its number of branches implementation of SDGs through PACS is one of the ideal strategies. As a value-based and principle driven organization, PACS are by nature a sustainable and participatory form of business. They place emphasis on job security and improved working conditions, pay competitive wages, promote additional income through profit-sharing and distribution of dividends, and support community facilities and services such as health clinics and schools.

The reason why PACS can be an ideal resource in mobilizing the implementation of SDGs is because as per ILO, SACCOs (PACS called in international parlance) worldwide are increasingly becoming a major source of the productive resources that are invested by members to create employment opportunities and increase household income. This is possible due to the growing ability of these credit cooperatives to mobilize substantial savings from which members can borrow. The World Council for Credit Unions (WOCCU) has 30 Cooperatives and the Sustainable Development Goals: A contribution to the post-2015 development debate worked through SACCOs on peer-to-peer
training to raise awareness, share information and mitigate the spread of HIV/AIDS through prevention in many countries (WOCCU, 2010).

Moreover, implementing SDGs through PACS makes sense as they work on democratic principles and practice social inclusion, thus making them most likely to support the cause of sustainable development. They offer an alternative model for enterprise, with contributions to sustainable development well beyond job creation. Since cooperatives’ share in GDP and total enterprises is currently relatively small in most countries, their promotion and expansion could be an important instrument for achieving the Sustainable Development Goals (SDGs).

**Literature Review**

In context to the relevance of PACS in the implementation of SDGs below are mentioned the relevant SDGs and some examples of the cooperatives who have adopted and implemented SDGs as part of their allied activity.

1. COPAC (Committee for the Promotion and Advancement of Cooperatives) is a multi-stakeholder partnership of global public and private institutions that promotes and advances people-centered, self-sustaining cooperative enterprises, guided by the principles of sustainable development – economic, social, and environmental – in all aspects of its work. The Committee’s current members are the UN Department of Economic and Social Affairs (DESA), the International Labor Organization (ILO), the Food and Agriculture Organization of the United Nations (FAO), the International Co-operative Alliance (ICA) and the World Farmers’ Organization (WFO).

2. In Kenya, the main type of back-office loan offered by most SACCOs is for paying school fees, which has afforded many members to educate their children. Development loans offered by most SACCOs have been used to buy land; build houses; invest in businesses and farming; buy household furniture and meet other family obligations (Wanyama et al, 2008).

3. In Ghana, where a study of the University of Ghana Cooperative Credit Union indicates that members frequently obtain loans to support informal businesses that supplement their wage income. These informal businesses are also known to offer part-time employment to housewives and domestic assistants in the University Staff Village. Indeed, an examination of the uses to which loans and withdrawals by members of the cooperative are put listed business as the leading of the nine substantive uses to which members direct their funds.
4. Rwanda, the Union des Banques Populaires, a savings and credit federation, has a huge membership of close to 400,000 and employs 600 staff. It has accumulated US$ 44 million in savings; it has expended US$ 36 million in loans; and makes an average annual surplus of US$ 1.5 million. The union is increasingly becoming instrumental in the provision of risk coverage to SACCOs in 573. Cooperatives and the proposed Sustainable Development Goals the country, thereby strengthening SACCOs’ capacity to serve a larger clientele (Nyamwasa, 2008).

Research Methodology

To understand how SDGs can be implemented through PACS one needs to understand the inter relation between the objective of the SDG and how activity can be channelized through the PACS so as to achieve the goal.

To understand the underlying plan of how PACS can be instrumental in implementing the SDG we need to understand the relevance between the two. PACS are based in rural areas where agriculture is the predominant occupation. At the same time, sustainability starts with the air that we breathe and food that we eat. Thus, sustainable living propitiates through agriculture.

The SDG 1,2,3,6 deal with poverty, hunger and wellbeing which can be achieved only through higher productivity in agriculture. However, higher productivity is often labeled with use of inorganic farming which reduces poverty and thereby hunger however leads to lower shelf period for wellbeing. Wellbeing is sustainable only through sustainable farming. Thus, a balance needs to be achieved between reducing poverty and hunger and elongating the shelf life of wellbeing.

The SDG of 4 and 8 deals with quality education, training, learning opportunities and employment which the rural areas lack. Thus, empowering these SDGs through PACS finds more relevance as educational activities fund trained staff employability in PACS and trained staff further trains rural youth and children.

To be specific the SDG number 1-9, 12 and 15 are of relatively direct significance where PACS could play an efficient role to deal with them. Thus, it is discussed in this paper how these SDGs can play a vital role to arrest non sustainability through PACS which have deeper reach in the society.

SDG 7 deals with usage of renewable energy. There is a scarcity of Grid power resources in remote villages. Empowering villages through renewable energy is the only way out.
However renewable energy installations need frequent maintenance through audits which are deficient due to inaccessibility. PACS can play the role of amalgamation by hiring trained staff through resource maximization and find more relevance in creating village-based installation audits.

SDG 12 deals with reducing farm wastage and reusability of waste materials. Most of the rural areas engage in burning farm waste instead of reusing the waste for production of organic fertilizers. Burning assists climate change due to pollution and is a major hazard leading to depletion in oxygen levels. Instead PACS can be major resource centers to educate and provide credit linked sustainability schemes to promote sustainable usage of farm waste.

SDG 15 deals with deforestation. Marginal farming leads to encroachment of adjoining forest areas to increase the area of cultivation which leads to slow depletion of forest areas. Newer in trend is the forest resorts whose mushrooming has led to upscale cutting of trees leading to many climatic hazards. PACS can make an impact in restricting such activities by engaging innovative solutions.

Thus, we discuss in this paper, based on factual and relevant observations, how there can be a handshake between PACS and sustainability leading to achievement of SDGs.

Observations and Suggestions

There exist cooperative models which were set up for a specific purpose however many such organizations have taken up activity to address the cause of sustainability while carrying out their own activity. Such observed and adopted activities are mentioned below which suggest how PACS too can adopt and implement the SDGs to serve the cause of sustainability.

In the Discussion below, the SDG 1,2,3,4,5,6,7,8,9,12,15 are discussed in context to their nomination and what makes them applicable to be implemented via the PACS architecture. Some of the existing models and criteria are also discussed to provide an in-depth understanding of this aspect.

Implementation of SDGs through PACS

1. SDG 1,2,3,6
2. End poverty in all its forms everywhere,
3. End hunger, achieve food security and improved nutrition,
4. Ensure healthy lives and promote well-being for all at all ages and promote sustainable agriculture,
5. Ensure availability and sustainable management of water and sanitation for all
The Indian poverty in the rural scenario is more observed in states depending on agricultural income of the famers who turn into most suitable candidates for migration to metro cities to provide at least two daily meals for their families. Most of the farmers based on their acquired skills work as daily labor living in pitiable conditions in the cities during the non-farming seasons. These farmers seek credit in the form of farm loans from PACS for farming activities. Also, many times PACS works as a facilitating agency supplying subsidized seeds and fertilizers. However, there are many farmers who are poorly educated or illiterate who depend on knowledge of traditional methods of farming and oblivious of the sustainable use of fertilizers and crop patterns. Undefined use of fertilizers and pesticides in the hope of ending poverty by earning more farm returns. In fact, pushed the farmer into chaos due to decreasing soil quality and poor yield. Thus, leading to poor quality of debt repayment leading to Non-Performing Assets (NPAs) in PACS.

At this juncture PACS can play an important role in informing the farmers about sustainable farming methods and promoting them. Sustainable farming not only improves nutrition in crops but helps maintain environment friendly development. This would help improve sustainable farming thus yielding sustainable income to enable timely repayment of debt, thus, leveraging the farmers from poverty. Healthy and nutritive quality of the crop grown using sustainable practices such as healthy use of fertilizers and pesticides, adequate crop rotation which helps retain moisture in soil and fixes the lost soil nutrients helps not only building good health in consumers but also maintains soil productivity. Farmers can be trained by PACS in association with training agencies like BIRD to use sustainable practices.

If PACS was to be used to facilitate the implementation of the SDGs 1,2,3,6; then it should ensure that along with facilitation of credit,

1. Farmers need to be promoted to use sustainable irrigation practices
2. Subsidized credit for cash earning farming activities through sustainable use of organic fertilizers like compost etc.
3. Promotion of maximization of income through area specific funding for diversified farm activities.
4. Farmers to be promoted to use credit to conduct at least a certain percentage of their farm produce with organic methods.

2. **SDG 4 and 8**
4. Ensure inclusive and equitable quality education and promote life-long learning opportunities for all.
8. Promote sustained, inclusive, and sustainable economic growth, full and productive employment and decent work for all.

PACS are known for higher employability. However, they lack in qualitative employment due to remoteness of establishment. As per principles of cooperation the returns on PACS deposits are mandatory to be invested in social wellbeing activities needs to be invested in building school infrastructure and educating village youth. Such skilled youth can then be employed to handle the day-to-day affairs of PACS administration. Trained village youth employed with PACS will help more responsibility towards the very institution taking care of the financial needs of the rural set up. Undoubtedly, extra revenue will help sustain the morale and responsibility of the rural youth apart from increasing the knowledge in running the PACS administration coupled with decent employment. The village youth can be further trained in sustainable farming practices who can serve as trainers and guide farmers of the village.

Similarly PACS can support financially as well as in the context of human resource activities such as,

1. Vocational skills workshops for farm related activities such as water pump repair, tractor repair, electronic parts assembling etc., can be conducted by PACS as a CSR activity.

2. Funding Technology Innovation and Incubation centers for students interested in developing innovative farm equipment suiting the area specific farm conditions can also be an added advantage.

3. Training teachers to run balwadis and crèche for children of poor farmers whose parents are held up on fields will lead to a socio-economic benefit.

3) SDG 7:

**Ensure access to affordable, reliable, sustainable, and modern energy for all**

Far flung rural areas are still energy deficient promoting the use of sustainable energy by allowing credit and knowledge for setting-up such systems will promote use of sustainable technology and bring light to homes.

Large numbers of small hydro power stations are already set-up on small high energy gushing streams in hilly areas of Hill states like Jammu & Kashmir and Himachal Pradesh by NABARD have helped bring light to these non-accessible areas. Irrigation and water pumps, charging of tractor batteries, small mills etc. can work on such sustainable sources of energy such as solar, wind, biomass and hydroelectricity. PACS can facilitate credit on such terms and help promote this SDG for the betterment of the society. PACS can fund for setting-
up of solar farms in barren areas around the rural areas based on cooperative principles which can be used as an energy resource by the entire village.

In special cases PACS can initially fund Energy Bonds of such cooperatives which will help promote and set up renewable energy projects. In this case they can work hand in hand with Rural Electrification Corporation Ltd., architecture for technical-know-how.

At present, solar poles have been installed in many rural areas (Efficacy and Use of Renewable Energy in rural Maharashtra, 2014, IMC) through district level authorities, however, there has been deficient maintenance of these installed poles. Due to ill-maintenance of these installations many such investments have gone to waste. PACS can be assigned as a monitoring and audit agency due to its widespread network. This will not only help increase efficiency and employability of the staff but also help make PACS a multifaceted agency catering to rural needs. Also, PACS based on cooperative fundamentals will be more religiously committed to such a cause.

Renewable energy can prove to be boon to farmers especially when diesel costs have skyrocketed. Use of Tractors working on green energy backed by solar panels or on batteries powered by solar power need to be promoted with subsidized credit through PACS. This will not only cut down farming costs but at the same time arrest diesel pollution in the fields.

4) SDG 12

Ensure sustainable consumption and production patterns

Farming produces its own waste resulting from old crops, animal waste etc. this waste has potential to be reused by converting into compost or briquettes from biomass. This product made from waste helps in sustainable farming. Organic farming though not a good strategy for Indian farmers in entirety however it can be partially adopted to make the produce sustainable. Reuse and recycling of sanitation water after treatment, water harvesting during monsoons, avoiding burning of remains of old crops instead recycling the same in soil can be some of the measures which could be taken to achieve this goal.

PACS can be instrumental in promoting cooperative community kitchens which can be organized at suggestive intervals to promote right nutrition in food consumption in rural areas. Funding nutrition centers on the village level to check nutrition among all age groups and suggest food security solutions through cooperative community kitchens will help the promotion of sustainable means to consume and produce food.
Community kitchens are already being practiced at the time of religious events however right nutrition is not the criteria. Many a time, such community kitchens organized during village festivals are sponsored by the local PACS as a goodwill gesture. Thus, these community kitchens can be further used to promote not only nutrition but also sustainable production practices such as use of a common biogas plant for fuel purposes. Use of only organic produce for the consumption etc. Such get-togethers can be further used for the purpose of educational workshops to help manage village waste through sustainable methods.

PACS while availing credit lines should promote incentive for the three R’s (reduction, reuse, recycling) with appropriate riders.

5) SDG 15

**Protect, restore, and promote sustainable use of terrestrial ecosystems, sustainably manage forests, combat desertification, and halt and reverse land degradation and halt biodiversity**

Marginal farming is on rise due to nuclearization of the families leading to forest encroachments. Deficiency in forest cover or deforestation further leads to silting and rise of salts in soil leading to poor soil quality and loss of productivity per acre. To stop the rise of salts in soil it is very important to maintain an adequate cover of forests or trees which take up these salts. Tree plantation of a variety of trees yielding additional income is desirable to overcome this issue.

Increasing forest cover can be promoted mainly in areas where income generating activities can be associated with plantation of trees. Apiaries set up in areas of concentrated plantation of certain trees like Jambhul are in vogue to produce Jamun honey. Jambhul trees are also used in horticulture. Such dual use will help cash earning as well as sustainability for the farmer.

Such concepts can be experimented through PACS intervention by having specialty credit lines to promote plantation of trees thereby increasing forest cover on deforested hills. Such projects will not only reverse climate change but help in ground water retention. Many of the rural areas especially in Maharashtra where depleting ground water level is a huge problem. The recently launched Jaluyk Shivar Abhiyaan can identify corresponding area wise PACS to aid in their mission by promoting plantation of trees as a part of water conservation activity.

In addition, PACS can sponsor or have funds partially routed through them to set up mini forests every 10 kms with a concentration of at least 50 trees that of Anjani, Pipal, Rumad and Vat as known locally who themselves
consume less water and their deep roots hold soil and retain water with their leaves absorbing pollution and oxygenating the rural environment to the maximum.

PACS can also facilitate provision of tree saplings to be planted in affected areas during monsoons and maintain their growth to help soil revival in affected areas and restrict the spread of salty soil to other productive areas as a CSR activity. This can also be promoted as a scheme “Take Credit maintain a Tree” which will help consciously promote planting a tree.

Observing the scope of each of the mentioned SDGs it is important to note that there has been enough evidence that cooperatives have already left an interesting mark in implementing the SDGs and involving PACS in this implementation would enhance the effectiveness of this implementation as it would be a binding on the members of the PACS to imbibe the SDGs in their organizational objectives.

The dense network of PACS provides a huge scope to implement sustainable goals in a true sense. Above all implementation of SDGs through PACS has more relevance as credit consciousness will lead to sustainability consciousness.

The SDGs 1-9, 12, 15 which could be applied through PACS and are the ones which have complete relevance to the objectives of PACS and will do more help in promoting sustainable agriculture.

**Conclusion**

Non sustainable agriculture practices have led to widespread chaos especially in bad water and crop management, overuse of fertilizers and pesticides etc. which has led to loss of fertility and moisture in the soil making the crops toxic. Further deforestation of land for agriculture has led to climate change which is further worsening the Indian agricultural scene leading to loss in agriculture GDP. The delay and irregularities in monsoon is the impact of this climate change. If SDGs become the objectives of PACS then the positive impact will be more observable. All types of cooperatives are now informed to follow sustainable practices and have been aggressively promoting SDGs however the role of PACS would prove to be more effective being a credit allocating agency. Credit allocation with inbuilt riders which make it mandatory to perform farm activity based on SDG will be more promptly followed rather than the normal act of promotion via general cooperatives. Moreover, implementation of SDGs will help retain NPAs at 1% due to wider shelf life of productivity due to sustainable practices. This will help forecasting the amplitude of credit requirements and ensure repayment ability at the same time.
To imbibe the promotion of SDGs in their objectives PACS at the same time are not required to make huge compromises in their architecture and the adoption and implementation lies well within the scope of their architecture and organizational limit.

Thus, PACS could be branded as an institution which not only promotes SDGs in India but at the same time it can be branded as a provider of local jobs and SDG related and skill-oriented training to local village youth thus strengthening the quotient of wellbeing in their lives and restricting migration to urban areas to a large extent.

If SDGs are the warriors against climate change then PACS are the arms to be used in this fight against climate change.

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