
PROMOTING RURAL AND BENEFITS OF COMMUNITY SUPPORTED AGRICULTURE IN INDIA

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ABSTRACT

In the India, there is a tremendous amount of interest in Community Supported Agriculture (CSA) among farmers, consumers, activists, and policymakers. In India, smallholder and marginal farmers with less than two hectares of land account for 86.2% of all farmers, but own just 47.3% of the arable land, according to provisional numbers from the 10th agriculture census 2020–2021. In comparison, the census revealed that semi-medium and medium land holding farmers own between 2 and 10 hectares of land, account for 13.2% of all farmers, but own 43.6% of crop area. In India, there is large number of smallholder and marginal farmers, close to 126 million, there are many challenges which are faced by the farmers. Further, the 126 million farmers together own about 74.4 million hectares of land an average of 0.6 hectares each. Since there is very less land holding the farmers cannot invest in the latest technology or machinery. Since the farm they produce is not even sufficient for their self-sustaining financially—and so they couldn't further invest in machinery or the technology.

Key words : Community Supported Agriculture, farmers

INTRODUCTION

The Community Supported Agriculture (CSA) concept was born in the 1980s in the United States and has been expanded throughout the world. CSA is a “concept describing a community based organization of producers and consumers. The consumers agree to provide direct support to the local growers who will produce their food. The growers agree to do their best to provide a sufficient quantity and quality of food to meet the needs and expectations of the consumers.” (Lamb, 1994: 39). The concept translates into multiple forms: consumer-directed, farmer directed, farmer-coordinated, and farmer consumer cooperatives (Polimeni et al., 2015). Some authors insist upon the similarity of CSAs all over the world (Henderson and Van En, 2007; Gregson and Gregson, 2004), while others stress the diversity of CSAs (Goland, 2002). Recently, a paper presented the “ideal” CSA model through a case study in Belgium (Bloemmen et al., 2015).

Even if the concept was born in the US, the North American CSA model has Japanese and European roots. At the origin of CSA, we find the cooperative movement. The Teikei system in Japan (1965) was a producer-consumer copartnership developed by a small group of Japanese women concerned with food safety, pesticides, processed and imported food, and the decrease of the small-scale farming population in Japan. They created an alternative to the market by developing a mutually supportive cooperation between consumer and producers. In Europe, the development of biodynamic farming was initiated by Rudolf Steiner (1861-1925). The biodynamic farm Buschbergerh of implemented Steiner's ideas in 1955. European associative economic relations started in the 1970s in Switzerland and Germany. Jan Vander Tuin traveled to study them and inspired by their practices, he founded the CSA farm Topinambour in Zurich in 1984. The producer

consumer food alliance was created in Geneva, and the CSA model developed, as more consumers became “shareholders”.

WHAT IS CSA?

Community sustained agriculture is a socio-economic model of responsible, sustainable agriculture and food distribution where a community of individuals pledge to share both the costs and benefits of food production. The community in which a CSA were to be implemented, consists of producers and consumers where the producers will provide the care taking and oversee the food production and the consumers will provide direct, up-front support for all the finances needed to sustain the CSA. Both parties commit to a CSA after taking into consideration and understanding the risks and benefits of food production.

This concept of locally grown food was first founded in the early 1960s in Japan and Switzerland. After a massive increase in the import of foods as well as a constant loss of farmland to development and the migration of farmers to cities, Japanese people looked for a solution to put an end to they're ever-growing problem. Furthermore, a Japanese philosopher by the name of Teruo Ichiraku introduced consumers of Japan of the ideas of safe farming and the dangers of the chemical dangers of agricultural used the major food suppliers, thus, setting off the organic agriculture movement. With the help of homemakers of the community, Teruo Ichiraku began the first “teikei” which means partnership of a community and a farm. And today Japan has clubs that operate under a “teikei” concept where hundreds of farmers harvest enough food to serve thousands of people. Similarly, in Switzerland where fifty farmers came together in to late 1970s on rented land, poor tools and only one crops to plant, turnips. Organizations began throughout Europe and spread quite rapidly to all different regions.

In the mid-1980s, this innovative idea reached the United States from Europe where the first 2 CSA farms were established in Wilton, New Hampshire and Egremont, Massachusetts. And by 2007 there were over 12,000 CSA farms established throughout the United States. Today we hear of new CSAs with new and improved structures and systems involving non-profits, farmers markets, and work places. CSAs range from size and region. Not only can the idea be implemented in rural areas but also in urban areas where it is referred to as urban agriculture. CSA farmers typically use organic or biodynamic farming methods, and strive to provide fresh, high-quality foods. More people participate in the farming operation than on conventional farms, and some projects encourage members to work on the farm in exchange for a portion of the membership costs.

Something important to be noted and mentioned earlier is the characteristics of a CSA. What is a CSA exactly? How does one know how to properly start one? There is no right answer to this, CSA take many forms, the arrangement rage from farm to farm and are specific to those who have agreed to be a part of that community. It is said “If there is a common understanding among people who have been involved with CSAs, it is that there is no formula. Each group that gets started has to assess its own goals, skills, and resources, and then proceed from that point”. However there are some key concepts that need to be resolved before the beginning of a CSA, as stated by Lamb, some practical arrangements must be made:

- For farmers to know the needs of the community before beginning to work the land.
- For the consumer to have an opportunity to express to the farmers what their food needs and financial limits are.
- For commitments to be consciously established between farmers and consumers.
- For famers; needs to be recognized, thus freeing them to serve the community.

Most CSAs offer a diversity of crops like vegetables, fruits, and herbs in season and some provide a full assortment of farm harvest, including eggs, meat, milk, baked goods, and even firewood. Some farms offer a single commodity, or they team up with others farms (like those seen in Japan) so that members receive goods on a more nearly year-round basis. Some individual CSAs are dedicated to serving particular community needs, such as helping to liberate homeless persons. Each CSA is structured to meet the needs of the participants, so many variations exist, including the level of financial commitment and active participation by the shareholders; financing, land ownership, and legal form of the farm operation; and details of payment plans and food distribution systems. The agreements within each community don't need to be documents legally; they can be a written agreement or even a spiritual one in which all parties just agree.

CSA INDIA

As per the Economic Survey 2017–2018, the agriculture sector employs more than 50 percent of the total workforce in India and contributes around 17–18 percent to the country's GDP. Further, the economic survey says that with growing rural to urban migration by men, there is “feminization of the agriculture sector”, with an increasing number of women in multiple roles as cultivators, entrepreneurs, and laborers. Traditional farming is highly labor-intensive and it is the family labor that has been mainly involved in various agriculture and joint activities at the community level. The researchers indicated that lack of economic incentives is forcing the rural youth, the main labor force, to out-migrate to urban areas in search of off-farm employment. The rural youth, in recent years, finding the agriculture not worth the effort.

Around two-thirds of India's population is in rural areas and a large proportion of this population lives in abject poverty. According to the “Household Survey on India's Citizen Environment and Consumer Economy”, of the bottom 20% of India's income quintile, 89% live in rural areas. There is an urgent need to improve the economic scenario in rural India to have a sustainable and robust growth model for the country as a whole. For sustainability in agriculture, there is need of strong government intervening and focusing on rural India.

As per the latest research by Bisht et.al., 2020, they suggested four interventions as providing better initiatives towards sustainability into traditional farming systems across the country, they are

- Promoting community-supported agriculture (CSA) initiatives.
- Linking smallholder farming to the midday meal school feeding programmes.
- Enhancing market access and value chain development for local plant food resources
- Enhancing off-farm employment opportunities for rural youth at the community level.
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Promoting Traditional Organic-farming

“The traditional agriculture in all agro-ecologies is largely organic, with limited use of purchased inputs. Formal expansion of organic farming in the traditional production areas, which relies on ecological processes, biodiversity, and cropping cycles that are adapted to local conditions and generally excludes or strictly limits the use of agrichemical inputs, will benefit the economy in terms of greater employment and business diversification”(Bisht et.al., 2020). Positive-sum employment gains are expected in organic farming and local food systems, as organic farms are more labor-intensive than conventional industrialized production. In addition, there are also incremental positive impacts on job creation in both on-farm processing (e.g., quality sorting and special handling) and non-farm production of organic agricultural inputs (e.g., natural fertilizers) and post-harvest farm-to-market supply chains. Therefore, rather than displacing the agricultural workforce, a greener agriculture safeguards livelihood by keeping people on the land and realizing a broad range of livelihoods on the basis of its enhanced productivity. Additionally, it was revealed that organic farming yields

more total food produced than conventional industrialized farming on the same amount of land. Further, the organically grown traditional food is considered nutritious and a food-based approach towards community nutrition and health can be easily advocated in traditional agricultural landscapes.

Promoting Community Supported Agriculture (CSA) Initiatives

Community Supported Agriculture (CSA) can be transformational and can be effectively revive traditional agriculture for better livelihood security of native farming communities. As agriculture is the main source of economy for all the rural families, CSA can become a model for a much-needed shift towards a truly sustainable economy. CSA initiatives are less exposed to market pressures, and thus offer much more freedom for experimentation in agricultural practices and the farmers income would be stable throughout the year. Hence, the farmers need to form cooperatives at the village level, pooling their land and undertaking collective farming, so that they produce enough surplus food for local marketing. Farmers need to move to more sustainable methods of farming.

CSA ABROAD

Although the adoption of CSA farms and gardens is continuing to spread rapidly throughout the US and have been tremendously successful, our main focus is on the implementation CSA projects in developing countries, such as those in rural Latin America, Africa, and Asia. In regard to this endeavor, we raise several pressing questions. Can such a model be applied to impoverished regions of the world struggling with famine? Would this be feasible? And moreover, will the benefits be far-reaching, and exactly how much impact will CSA have on the world's food crisis? To begin to address these questions, we chose to present a case study of one enormously successful CSA system abroad to demonstrate that CSA is very much a promising possibility elsewhere.

Little Donkey Farm: A true sign that the tide may be shifting, the Little Donkey Farm located in a rural village northwest of Beijing is the first-ever Chinese CSA farm. Established in 2008 by Shi Yan, a graduate from the Renmen University of Beijing, the farm grows a wide variety of crops such as green beans, eggplant, corn, and Chinese cabbage and has the support of four hundred families who pay an annual membership in exchange for a share of the harvest as well as an extra 260 families who rent small plots of land for their personal gardens and numerous international supporters. Each customer must pay in advance before the growing season, thus the benefits and risks are shared between by the farm and the participants. The Little Donkey Farm has been such a huge success because it continues to effectively addressed the growing concerns of agriculture and China and the recent trends that are threatening to the food system, such as wide use of pesticides that are contaminating food supplies and the environment alike. By using organic methods and involving the community, the farm has dodged these unsustainable practices while maintaining a smart and flourishing business model that contributes to an increasingly healthy community that supports an increasingly healthy population.

UNIQUE METHOD

One of the aspects of CSA we tried to focus on was implementing a CSA farm or garden in different geographical areas. A single basic design of a CSA farm or garden may or may not be suitable for some areas. Many developing countries have regions that are incapable of supporting a farm or garden on a large scale, but there are other methods to implement the concept. Poverty stricken regions of developing countries come in many shapes and sizes. The method of CSA in the form of raise beds and container gardening would be

best suitable to tightly packed regions with dense population and minimal open land. Raise bed gardens are a rather simple concept in which wooden two by fours are used to create the regions on which the gardening would take place. Raise beds would be very desirable to implement as opposed to open fields of crops because it would ensure a more organized system in which the care take and upkeep of the CSA system created could be split up. Furthermore many crops are easier to grow when they are isolated from other crops; for example tomatoes are best grown separately because they grow rapidly and outwardly as opposed to other crops which don't overtake the area with outgrowth.

Alternatively, container gardens are also an option. Container gardening is actually a well renowned practice throughout the world. From big farms to small suburban cities with pot on the window ledges, the concept behind container gardening can fuse the that of CSA; small towns of dense populations living closely together with little to no space for a large farm or even raise beds can still use the idea of a community sustained agriculture. The community can still plant containers, crates, or any form of container to keep in their homes to raise a specific crop. The work can be divided amongst the family members and the entire house hold can go to sleep on full stomachs. To create a container garden may seem like a small contribution and not a big milestone, but little by little it can make a big difference. Compact areas with houses built close together like those found in Brazil, Pakistan, India, just to give some examples. Small networks can be established between a couple of household in which common a compost is used to raise the crops in the container gardens and then they are later utilized to trade share amongst each other. The logic lies in that each household puts in the same amount of energy and effort to raise their crops and now a modified yet successful CSA container garden is established.

CSA BENEFITS

CSA as a sustainable philosophy has been so immensely successful in places where it had been implemented because of the numerous range of advantages which it can provide. These include economic, environmental, health, and social benefits

Economic Benefits : Perhaps the most pervasive trend of modern day agriculture is the expansion of industrial farming, a system which has already established itself in many developed countries such as the United States and continues to take root globally, working itself into the food production arena in rural communities around the world. Since the main focus of industrial agriculture is to maximize profits, this corporate mentality often fails to consider both small-scale farmers, who struggle to compete against these corporations and adapt to changing technologies and practices, as well as consumers, who feel as though they have little say in the way their food is being produced. Since it requires the cooperation of both producers and consumers on behalf of one another, and both parties are required to share both the costs and benefits of maintaining the farm, CSA bridges the gap between farmer and ordinary individuals through community involvement, fostering a close, intimate relationship between two vital parts of the agricultural production and consumption process. As a result, it makes the consumer more conscious of his or her role in the food production process while simultaneously helping the farmer gain a better understanding of the impacts agriculture has on the community, ultimately allowing both sides to gain the necessary knowledge in order to maximize the positive benefits of their contributions. When producer and consumer begin to work directly with each other, the process of bringing food from the farm to the dinner table is simplified. Cutting out big corporations as well as the need to compete against them to produce local food helps small-scale farms stay afloat and thriving. Because smaller farming operations require less capital investment to grow and transport food, this ultimately ensures that less money is being poured into colossal corporate farms that do not have the people's best interest in mind. Furthermore, industrial agriculture primarily aims to support export markets,

leaving local people hungry and short on food. Therefore, a more substantial amount of successful local farmers can mean a rise in food security because the food they produce will surely be distributed throughout the community, not shipped off to faraway place overseas.

Environmental Benefits : Due to the resource- and capital-intensive nature of industrial agriculture and its concern over maximizing profits rather than the health of the people and the environment, agricultural corporations utilize and waste huge amounts of pesticides, inorganic fertilizers, and fossil fuel energy on food production. These unsustainable practices generate damaging run-off that pollute soil and waterways, increase the spread of diseases through lack of sufficient sanitation, and contribute to the current climate change issue and the energy crisis. With its focus on bringing people closer to the environment, CSA addresses all of these issues. Consumers have become so far removed from the actual food production process that the devastating impacts it can have on both the natural and the human environment fail to reach our grasp. However, since CSA farms and gardens utilize primarily organic and sustainable practices to their best advantage, such as the method of using non-synthetic pesticides and natural as opposed to chemical fertilizers, these practices elevate and maintain the health of both the people and the environment. In simplifying the food production process, CSA reduces the travel miles that are required to reach people's plates, which reduces emissions and lowers the carbon footprint. In essence, shedding the dependency on corporate food production and refining the food supply chain reduces our need to rely solely on the unsustainable practices, bringing power and influence back to the people while increasing food security for the general population by providing it with fresh, high-quality produce that is readily available at the community level.

Social Benefits : Beyond these advantages, the positive socio-economic impacts are a vital part of CSA as well. Direct participation by shareholders strengthens social conditions because it gives people a sense of purpose in their roles as consumers and contributing citizens, heightening social concerns enough for people to begin to address the multitude of ongoing problems in their communities, such as poverty and class tension. Many CSA operations have successfully incorporated educational programs into their agendas, which offer families and children a broad understanding of sustainability and ways to participate in community farming or gardening. Moreover, direct participation and cooperation between people of all different socio-economic backgrounds results in a heightened sense of community, providing those involved with greater incentive to nurture livelihoods beyond their own. Food production by way of CSA also allows the underprivileged sectors of society to afford healthy, nutritious produce, bringing more money and wealth into the community and simultaneously creating jobs.

LIMITATIONS

On the other hand, however, CSA systems do come with several drawbacks. Because all CSA farms require that shareholders sign a contract that may last anywhere from a single season to a full year and pay an up-front amount of money to participate in the system, it is possible to actually lose money if the individual fails to pick up the food grown after each production period, which is usually a week. Consumers can also lose out due to unforeseen consequences which can potentially ravage a farm and its ability to grow the necessary amount of produce, such as inclement weather conditions, bad harvests, pests, and overall unfavorable growing seasons. Therefore, there is always a certain degree of risk involved, forcing the consumer to weigh the pros and cons of participating in such an operation. Moreover, consumers do not always have much say in what type of crop is grown, so they must take whatever the farmer chooses to give them, a dismaying reality for those who crave constant variety in their crops. Eating locally means adjusting to the diverse growing seasons and accepting the fact that certain crops can only be produced at certain times of the year because imported, out-of-season food is no longer a possibility under this particular system.

Perhaps the most challenging aspect of CSA is the fact that not every region has the available resources to implement and properly maintain a garden or farm by this system. Garnering enough support to build and nurture one presents yet another shortcoming to the entire philosophy. Applying CSA to a certain area requires a thorough understanding of that particular area's unique climate, growing seasons, soil quality, water sources, wealth, demographic, social and economic conditions, and so on. Ultimately, it requires an immense amount of time and a certain amount of capital to get these projects off the ground, and in poor, rural communities, especially those in developing countries around the world, there is a general lack of leadership, talent, and initiative necessary to start a CSA project. Before CSA can become a widespread reality for the less developed regions, people will first and foremost need to be provided with substantial knowledge on how to grow food using CSA and why CSA is a valuable system in the first place.

CONCLUSION

The farmers at all four distinct farming agroecologies of India were interested in selling their farm produce locally. Farmers were also willing to form cooperatives at the village level, pooling their land and undertaking collective farming, so that they produce enough surplus food for local marketing. Lack of well-developed local food markets so far have been the largest barriers to selling food locally for farmers. Farmers and most consumers are attracted to the CSA model and MDM programmes, seeking alternative ways to produce, consume, and communicate around food, where they are actively defining the agenda, with a focus on food and nutrition security. They want to bring forth fresh, safe, and locally produced food that is produced with care for environment, health, justice, and animal welfare. All farmer respondents were therefore in favour of a transition to more sustainable methods of farming. Selling the farm produce locally within their community helps both consumers and farmers alike. With a strong political will and policy support, transition to a well-developed localized marketing is therefore a big possibility. Local food systems have to become the norm, not a niche.

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