

Review Article

Farmers Producer Organization (FPO): Empowering Indian Farming Community

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ABSTRACT

The contribution of agriculture in GDP has declining recent past from 50 per cent in 1950 to 16.5 per cent in 2019-20. In current Covid-19 pandemic, this is the only sector which is contributed positively with 3.4 per cent growth in both the first quarter of the financial year 2020-21. Farmers face different challenges such as scarcity of land and water sources, impassable roads, unavailability of better financial services and new technologies. Government wants to double the farmers' income in 2022-23 by addressing the challenges of farm sector. The government affirmed that farmer producer organizations (FPO) are the most appropriate institutional form around which farmers can mobilize and build their capacity to collectively leverage their production and marketing strength. The members of FPOs are smallholder farmers who organize themselves with the objective of improving farm income through improved production, marketing, and local processing activities. New technologies and marketing practices have not been practiced by most of the FPOs in India. The government should promote the FPOs at the policy intervention for sustenance of their members.

Keywords

Farmers Producer Organization (FPO), Farming, Company, Marketing

Introduction

Agriculture is the main source of livelihood for more than 50 per cent of Indian population and one the main income generating source. During the current pandemic of Covid-19 the growth of the agriculture is positive in both the starting quarters of financial year 2020-21 whereas the other sectors shows the negative growth (The Hindu, 2020). Most of farmers rely on

agricultural activities for their food and income, but they often lack the resources necessary to their success. In many areas there are limits to achievable increase in productivity, unless appropriate institutions that can help farmers to access information, inputs and services are strengthened, and joint action for natural resources management, marketing and processing are promoted. Farmers are committing suicides in recent years due to failure of agricultural

enterprises or crash in market prices. Farmers are the most direct and primary victims who face the consequences of agriculture risks (Skees and Enkh, 2002).

Farmers manage risks through a continuous adoptive process, whereby decisions are made based on perception of the external environment, resources and farmers' own attitude and preferences (IFAD, 2004). In risk management process, farmers consider and respond to a combination of external and internal factors, such as market access and the resources available to the farm households. Farmers of India are good producers but they fail to efficiently market their farm produce because of unavailability of markets in rural areas and poor marketing skills of farmers. One of the potential alternatives for efficient marketing is mobilizing farmers for group action, for arranging inputs and collective marketing so as to benefit from economies of scale (Sahu, 2014). Producer organisations (POs) are widely heralded as leading contributors to poverty reduction and achievement of food security (FAO, 2010). FICCI (2020) recognized that FPOs have a big role to play in not only building socio-economic resilience of farmers but also in achieving several sustainable development goals.

Producer organization

Rondot (2001) defined "The producer organizations (POs) are formal rural organizations whose members are smallholder farmers who organize themselves with the objective of improving farm income through improved production, marketing, and local processing activities." Producer Organizations (POs) are successfully strengthening the economic position of their members by providing agricultural inputs, credit, processing and marketing services (Narayanan and Gulati, 2002). Organizing

farmers into specific producer groups also improves the effectiveness and efficiency of agricultural system in supplying relevant commodity or product specific information and training directly to farmer groups who are producing particular crops or products (Swanson, 2008). Globally, POs are also increasingly recognized as an important actor in the Agricultural Innovation System (Heemskerk and Wennink, 2005; Shapland and Kampen, 2006; FAO, 2010). The Government has identified farmer producer organization as the most appropriate institutional form around which to mobilize farmers and build their capacity to collectively leverage their production and marketing strength (GoI, 2013). While several POs are doing well, a large number of POs struggle to continue their activities after the first few years of its formation (Barman, 2019).

POs engage in a range of activities to fulfill their objectives, and organize themselves in different ways: "legal entities, associations, cooperatives, self-help groups, multi-layer organizations (like local cooperatives and regional or national unions), shareholder-based companies and some mixes of these organizations" (Rondot, 2001). POs implement different activities depending on their objectives, investment opportunities, situations of the members and external conditions. Activities include organizing farmers to receive external support, bulk purchase and distribution of inputs, aggregation and joint sale (or buying) of farmer products, handling and storage, processing, transportation, mechanization services for farmers, and creating access to finance from banks and microfinance institutes.

The collectives of farmers in the form of producer companies is gaining popularity among the farmers/ producers and among the

promoting agencies primarily due to several advantages it carries in comparison to the conventional model of producers cooperatives such as multi objective, registration in Indian companies act, freedom in borrowing power, minimal government control, strict disclosure and audit requirement etc (Mondal 20010; GOI, 2013, NABCONS, 2011 and Singh and Singh, 2013).

Farmers Producer Organization

Farmers Producer Organization (FPO) is one type of PO where the members are farmers. During the 12th Plan period (2012-2017), Small Farmers' Agribusiness Consortium (SFAC) is providing support for promotion of FPOs (GOI, 2013). PO is a generic name for an organization of producers of any produce, e.g., agricultural, non-farm products, artisan products, etc. The Government hopes that this will foster technology penetration, improve productivity, enable improved access to inputs and services and increase farmer incomes (Chander, 2019). Farmers' Organizations (FOs) are essential institutions for the empowerment, poverty alleviation and advancement of farmers and the rural poor (FAO, 2006). National Commission on Farmers (NCF), 2004 stated that "Farmers' organizations should be promoted to combine the advantages of decentralized production and centralized services, post-harvest management, value addition and marketing." A PO for non farmers can also established if the producers produce a non farm item (for example, handloom or handicraft), then the PO will be that of non-farmers.

Type of Farmer Producer Organization

Basically POs cater to the producers' interests and their varied needs and organize activities that help strengthening the capacities of their members to deal with

production and marketing challenges. POs could be a farmer associations around a commodity (eg: Maharashtra State Grapes Grower Association) or around an activity like water management (eg: Pani Panchayats); a producer co-operatives (eg: milk cooperatives promoted by the National Dairy Development Board); or a producer company (eg: Vanilla India Producer Company Limited (VANILCO) (Mahesh Chander 2019). Farmers Organizations can take one of the many possible forms, like Farmer Interest Groups, Commodity Interest Groups, Cooperatives, Self-Help Groups, Farmers' Associations, Producer Organizations, Federations and Unions. Whatever be the form of the organization, there are some characteristics which hold farmer organizations together – a common interest, mandatory membership, rules, regulations and discipline, adherence to quality standards in production and shared roles and responsibilities on a rotation basis scale (Sahu, 2014). Chamala (1990) grouped farmer organizations into two types- one is the community-based and resource-orientated organization; the other one is the commodity-based and market-orientated organization.

Role of Farmer Producer Organization

FPO is a means to bring together the small and marginal farmers and other small producers to build their own business enterprise that will be managed by professionals. The farmers can decide to join forces to strengthen specific activities and develop a producer organization. These specific activities include input purchasing, collection and post-harvest processing, and selling (marketing) products. FPO can help farmers for production of various agricultural produce as well as during the process of marketing the crops. Farmer organizations offer small farmers to participate in the market more effectively and collectively,

they are in a better position to reduce transaction costs of accessing inputs and outputs, obtaining the necessary market information, securing access to new technologies and to tap into high value markets, allowing them to compete with larger farmers and agribusinesses (Kathiravan, 2017; Stockbridge *et al.*, 2003). The FPO can also be seen as an extension of the farm activities. The farmer can focus primarily on production while other activities can be outsourced to the farmer owned organization. In essence, while the primary production is managed by the farmers, POs can engage in a range of other enhanced post-harvest operations, input supply, and other activities needed to ensure that the farmer is able to produce the market-desired products at the right quality, time and price. An additional advantage of joining forces in a PO is that it allows hiring professional and specialized human capital that may be outside the reach of an individual farmer (Maijers *et al.*, 2016). The purpose of establishing Farmers' Organization (FOs) is to internalize extension services for its members and provide backward linkages (input, credit and technology) and forward linkages (production facilities, market and value addition) (Sahu, 2014).

Formation of producer company and steps to establish FPO

Producer companies are formed only among primary producers, that is, only people engaged in activities connected to primary production can join the company (Trebbin and Hassler, 2012). Primary produce has been defined as a produce of farmers arising from agriculture including animal husbandry, horticulture, floriculture, pisciculture, viticulture, forestry, forest products, re-vegetation, bee raising and farming plantation products; produce of persons engaged in handloom, handicraft and other cottage

industries; byproducts of such products; and products arising out of ancillary industries (Murray, 2015). The minimum number of founding members is ten individual members, or two institutional members such as self-help groups (SHGs), cooperatives, or any other formal farmer organization. The seed capital of the company is generated through an initial sale of shares. The producer companies made it an obligation for farmers interested in becoming a member to buy at least one share in the company. The share value, on average, is very low, ranging from Rs. 50 to 200 (Trebbin and Hassler, 2012). On registration, the producer company shall become as if it is a private limited company with the difference that a minimum of two persons cannot get them registered, the provision relating to a minimum paid-up capital of Rs. 1 lakh will not apply and the maximum number of members can also exceed 50. Members' equity cannot be publicly traded but only transferred. Every producer company must have a minimum of five but not more than fifteen directors.

The members of this board of directors are appointed from within the participating farming communities. Hence, the farmers also have direct voting rights, which is a source of democratic power. The directors are a group of members of the village community and are, in consequence, deeply embedded within local social structures.

This kind of recruitment practice and representation ensures leadership acceptance from within the community, and is a crucial point in successful farmer organizations. A full time chief executive is to be appointed by the board. He shall be an ex-officio director and will not be liable to retire by rotation and shall be entrusted with substantial powers of management as the board may determine (Wilson 2009, Trebbin and Hassler, 2012 and Murray 2015). Producer company have

positive features over a producer cooperative such as inclusion of cooperative principles, open membership, freedom in business and management by professional (NABCONS, 2011).

The main objective to form the FPOs is to enhance production, productivity and profitability of agriculturists, especially small farmers in the country.

The main activities in formation of FPOs are (GoI 2013) 1. Mobilizing farmers into groups of between 15- 20 members at the village level (called Farmer Interest Groups or FIGs) and building up their associations to an appropriate federating point i.e. Farmer Producer Organizations (FPOs) so as to plan and implement product-specific cluster/commercial crop cycles. Ministry of Agriculture (GoI, 2013) identified 7 stages for the formation of FPOs

Pre-project implementation

Enhancing Capacity and Implementation of Surplus Farm Production Plan (Mobilization Phase)

Pre-formation Stage of FPO/Collective and preparation of FPOs business plan through FIG level exercise

FPO formation Stage

FPO establishment stage

Implementation of business plan of FPO

Phase-out Systems for post-project sustainability

The FPOs registered under the special provisions of the Companies Act, 1956 as the most appropriate institutional form around which to mobilize farmers and build their

capacity to collectively enhance their production and marketing strengths (Mahesh Chander, 2019).

Producer Organization can also be registered under any of the legal provisions such as Cooperative Societies Act/ Autonomous or Mutually Aided Cooperative Societies Act of the respective State, Multi-State Cooperative Society Act, 2002, Societies registered under Society Registration Act, 1860 and Public Trusts registered under Indian Trusts Act, 1882.

Benefits to the members of FPOs

The FPO will offer a range of services to its members. It can be noted that it is providing almost end-to-end services to its members, covering almost all aspects of farming (from inputs, technical services to processing and marketing).

According to a survey organized by the National Institute of Agricultural Marketing (NIAM) some FPOs undertook the distribution of masks, cash advance to members and reaching out to vulnerable communities within their areas during covid-19 pandemic. As many as 24 FPOs distributed food and groceries to vulnerable communities (The Indian Express, 2020).

The FPO will facilitate linkages between farmers, processors, traders, and retailers to coordinate supply and demand and to access key business development services such as market information, input supplies, and transport services.

Based on the emerging needs, the FPO will keep on adding new services from time to time. The benefits that a farmer could have by being member a FPOs are (GOI, 2013; Murray, 2015; Trebbin and Hassler, 2012)

Financial

The FPO will provide loans for crops, livestock, machines, purchase of tractors, pump sets, construction of wells, laying of pipelines, sheds etc.

Input supply

Member farmers of FPO will be provided with low cost and quality inputs. Fertilizers, pesticides, dairy equipments, seeds, sprayers, pumpsets, accessories, pipelines etc will be supplied by the FPOs.

Procurement and packaging

The FPO will procure agriculture produce from its member farmers; will do the storage, value addition and packaging.

Marketing

By removing the middleman the FPO will do the direct marketing after procurement of agricultural and livestock produce.

It will help members to save time, transaction costs, weighing losses, distress sales, price down of agriculture produce, transportation cost, quality maintenance etc.

Bulk pooling of farm produce would enable members to apposition from where they can bargain as per the market.

Insurance

Various type of insurance such as Crop Insurance, Livestock insurance, Electric Motors Insurance and Life Insurance also provided by the FPOs.

Technical

Farmers will increase their knowledge and

skills in agricultural production with the help of FPOs. It also promotes best practices of farming and quick marketing information system.

Networking

FPOs will liaison the linkages with financial institutions, producers, processors, traders and consumers.

Export

FPOs can be oriented for foreign export by ensuring quality consistency, long term contract by regularity in supply to the corporate buyers.

Principles for sustainability of FPOs

Farmers' organizations are concerned with a wider range of activities, such as environmental conservation, in addition to their overall business goals. Small farmers and their organizations can, therefore, be regarded as critical for local food security and as managers of key environmental services in the self-interest of those living from and working the land (Seville *et al.*, 2011, Trebbin and Hassler 2012). FPOs are based on the values of self-help and responsibility, democracy, equality, equity and solidarity.

FPO members must believe in the ethical values of honesty, openness, social responsibility and caring for others. The guiding FPO principles for their sustainability are (GoI 2013)

Voluntary and open membership

FPOs are voluntary organizations and membership is open to all persons without gender, social, racial, political or religious discrimination.

Democratic farmer member control

Members of FPOs setting their policies and making decisions in a democratic way. Persons serving as elected representatives are accountable to the collective body of members. In primary FPOs farmer-members have equal voting rights (one member, one vote) and FPOs at other levels are also organised in a democratic manner.

Farmer-member economic participation

Members contribute equitably to, and democratically control, the capital of their FPO. At least part of that capital is usually the common property of the FPO.

Members usually receive limited compensation, if any, on capital subscribed as a condition of membership. Surplus fund can be allocated for any or all of the following purposes: developing their FPO, possibly by setting up reserves, part of which at least would be indivisible; benefiting members in proportion to their transactions with the FPO; and supporting other activities approved by the members.

Autonomy and independence

FPOs are autonomous, self-help organisations controlled by their farmer-members. If they enter into agreements with other organisations, including governments, or raise capital from external sources, they do so on terms that ensure democratic control by their farmer-members and maintain their FPO's autonomy.

Education, training and information

FPOs operatives provide education and training for their farmer-members, elected representatives, managers, and employees so

that they can contribute effectively to the development of their FPOs.

They inform the general public – particularly young people and opinion leaders – about the nature and benefits of FPOs.

Co-operation among FPOs

FPOs serve their members most effectively and strengthen the FPO movement by working together through local, national, regional and international structures.

Concern for the Community

FPOs work for the sustainable development of their communities through policies approved by their members.

Some examples of FPOs in India

Government tried rigorous attempts to establish more FPO and 2014 was declared as the Year of FPOs. In country nearly 7,374 FPOs (Govil *et al.*, 2020.) and there is target of forming an additional 10,000 FPOs by 2024(IFPRI, 2020).

In 2003, a new Part IXA was incorporated into the Companies Act, 1956, to facilitate establishment of producer companies for production, harvesting, procurement, grading, pooling, handling, marketing, selling and export of primary produce of the members or import of goods or services for their benefit(NABCONS, 2011). Some of the FPOs are following-

Indian Organic Farmers Producer Company Ltd.

The first farmers' producer company in Aluva was formed by the farmers producing organic products. Only producers with organic certification are eligible for membership of the company where patronage for one share is

fixed at Rs.40,000.

Thus, the holder of one share can market his/her own organic products worth a maximum of Rs.40,000 through the company (Muarry,2015).

The Maharashtra State Grapes Grower Association

This association maintain regular contacts with research centres working on grapes to access information and technologies related to grape farming and organizes educational programmes for its member farmers. They also support grape growers in developing integrated plant protection schedule against pest and diseases and implementing measures to reduce pesticide residues to facilitate exports. The Association organizes a number of seminars and conventions to educate growers and engage in policy advocacy on behalf of growers and also for strengthening the grape sector (Chander, 2019).

Vanilla India Producer Company Ltd (VANILCO) / Banana India Producer Company Ltd (BIPCL)

VANILCO has been promoted by Indian Farmers Movement (Infarm), a charitable society with over one lakh farmer members for catering to the long-term interests of the vanilla farmers. VANILCO works in tandem with vanilla growers to produce and market the best and choosy vanilla beans and extracts.

Pani Panchayats of Odisha

In Odisha, the Orissa Farmers Management Irrigation Act provides for the establishment of farmers organizations in all the irrigation systems, for their operation and maintenance. The Act enables farmers' participation, not only at a lower level but also in a restricted manner at the main system level.

Spices Board has promoted two producer companies, the Coinonya Farm Producer Company Limited for turmeric and Karbi Farms Producer Company Limited for ginger and chilly in Karbi Anglong District of Assam under organic cultivation for processing and exports (Muarry, 2015). Masuta Producer Company Limited Rangutra Craft Duniya Producer Company Limited, ESAF Swasraya Producer Company Limited are some of the successful producer companies established so far in India.

FPOs represents a tool for farmers to get organized and to reap benefits not only from joint action, but also from links to evolving high-value markets in India's urban centers. The initiatives like producer companies, farming becomes more remunerative and the lot of farmers improves the whole agricultural portfolio.

During current pandemic of covid-19 and disrupted supply chains, FPOs are bridging the supply chain gap by providing marketing support to member farmers, retailing agriculture produce directly in urban centers. Government allowed FPOs to sell their produce through e-National Agriculture Market (e-NAM) during this pandemic (Nikam and Kale, 2020).Such initiatives are commendable and are providing immediate relief to both farmers and urban consumers (FICCI,2020).

The organizational structure of producer companies borrows much from the cooperative idea, but they are professionally managed to ensure economic viability. The Indian government should actively promote those companies as experience shows that FPOs represent the interest of their members and have the potential to articulate their need for agricultural services.

References

- Barman U. 2019. Producer Organisations and Extension: Performance and Sustainability, Taking Stock and Shaping. The Future: Conversations on Extension, Agricultural Extension in South Asia (aesa), 474-478
- Chamala S. (1990). Establishing a group: A participative action model. In S. Chamala and P. D. Mortiss, Working together for Landcare: Group management skills and strategies, p. 13-38. Brisbane: Australian Academic Press.
- Chander M. 2019. Producer Organizations (Pos) and Extension: The Road Ahead, Taking Stock and Shaping. The Future: Conversations on Extension, Agricultural Extension in South Asia (aesa), 479-482
- FAO (2010). Producer organizations: Reclaiming opportunities for development. FAO Regional Office for Africa. (available at <http://www.fao.org/3/am072e/am072e00.pdf> (accessed on 22nd July, 2019).
- FICCI 2020, Empowering FPOs, Sharpening the Saw: Preparing FPOs as an effective tool towards Aatmanirabhar Bharat. <http://ficci.in/spdocument/23272/FICI-Empowering-FPOs-Paper.pdf>
- GoI 2013. Policy and process guidelines for farmer producer organisations. Dept. of Agriculture and Cooperation, Ministry of Agriculture, Government of India. (available at http://mofpi.nic.in/sites/default/files/fpo_policy_process_guidelines_1_april_2013.pdf (accessed on 20th July, 2019).
- Govil R., Neti A and Rao M. R. 2020. Farmer Producer Companies: Past, Present and Future. Azim Premji University, Bangalore 6
- Heemskerk W and Wennink B. 2005. Stakeholder-driven funding mechanisms for agricultural innovation- Case studies from Sub-Saharan Africa. Bulletin 373. KIT Publishers, Amsterdam.
- IFAD (2004). A participatory method to understand farmer perceptions of risk so as to improve the delivery, adoption and impact of East Coast Fever control. <http://www.ifad.org/lrkm/lans/11.htm>.
- IFPRI, 2020. Farmer organizations with its business as usual may not be the magic solution to covid-19 recovery <http://southasia.ifpri.info/2020/05/21/farmer-organizations-with-its-business-as-usual-may-not-be-the-magic-solution-to-covid-19-recovery/>. (Accessed on 28th November, 2020)
- Kale Rajiv and Nikam Vinayak, 2020. Unshackling Farmer Producer Organisations from the Covid – 19 Lockdown, Blog 110, Agriculture Extension In South Asia https://www.researchgate.net/publication/340600072_unshackling_farmer_producer_organisations_from_the_covid_-_19_lockdown
- Kathiravan, N., T. Senthilkumar and Sudeep Kumar, N.K. 2017. Identification of Bottlenecks Perceived among the Farmer Producer Organizations to Augment its Role and Function. *Int.J.Curr.Microbiol.App.Sci*.6(9):216-219.doi:<https://doi.org/10.20546/ijemas.2017.609.029>(accessed on 25th July, 2019)
- Maijers W. Nalla V. and Commandeur D. 2016 Producer Organizations: Going into Business with Formal Markets. http://www.snv.org/public/cms/sites/default/files/explore/download/snv_pghsf_supplier_devlopment_spread_digital.pdf (Accessed on 23th July,

- 2019)
- Mondal, A. 2010. "Farmers producer company (FPC): concept, practice and learning- A case from Action for Social Advancement", *Financing Agriculture*, Vol. 42, Issue. 7, pp. 29-33.
- Murray E. V. 2015. "Producer Company Model-Current Status and Future Outlook: Opportunity for Bank Finance", *Research Gate*, [https://www.researchgate.net/publication/228888927_Producer_Company_Model-Current_Status_and_Future_Outlook_Opportunities_for_Bank_Finance]. (Accessed on 20th July, 2019)
- NABCONS. 2011. "Integration of Small Producers into Producer Companies: Status and Scope", *NABARD Consultancy Services Pvt. Ltd.* [https://www.researchgate.net/profile/Emmanuel_Murray/publication/272494774_Integrating_Small_Producers_into_Producer_Companies_-_Status_Scope/links/54e6cb890cf2cd2e02907717/Integrating-Small-Producers-into-Producer-Companies-Status-Scope.pdf]. (Accessed on 20th July, 2019)
- Narayanan S and Gulati A. 2002. Globalization and the smallholders: a review of issues, approaches, and implications. MSSD Discussion Paper 50, Washington, DC: IFPRI.
- Rondot, P. and M. H. Collion. 2001 *Producer organizations their contribution to rural capacity building and poverty reduction*, Rural Development Department World Bank, Washington.
- Sahu S. 2014. Socio-Economic Impact of Farmers' Organisation: A Critical Analysis, M.Sc. Thesis Submitted to Division Of Agricultural Extension, ICAR-Indian Agricultural Research Institute, New Delhi – 110012
- Seville D, Buxton A and Vorley B, 2011. Under What Conditions are Value Chains Effective for Pro-poor Development International Institute for Environment and Development, London
- Shapland B and Kampen J (eds) 2006. Farmers' organizations and agricultural innovation: case studies from Benin, Rwanda and Tanzania, Bulletin 374. Royal Tropical Institute (KIT) – Amsterdam KIT Development, Policy and Practice, 2006.
- Singh, S., and Singh, T. 2013. "Producer Companies in India: A study of organization and Performance", *Centre for Management in Agriculture*, Indian Institute Management, Ahmedabad, Publication No. 246, Accessed on 29 July 2019. https://www.iima.ac.in/c/document_library/get_file?uuid=6eb2a966-9b58-4a85-94bd-b1aa38cd98a3&groupId=62390].
- Skees J. R. and Enkh-Amgalan, A. (2002). Examining the feasibility livestock insurance in Mongolia, World Bank Policy Research Working Paper No. 2886, Washington.
- Stockbridge M. Dorward A. and Kydd J. (2003). Farmers' Organisations for Market Access: Learning from Success. SDC Briefing Paper. Swiss Development Corporation: Bern.
- Swanson BE. 2008. Global Review of Good Agricultural Extension and Advisory Service Practices. Food and Agriculture Organization of the United Nations, Rome, 64p. (available at ftp://ftp.fao.org/docrep/fao/011/i0261e/i0261e00.pdf)
- The Indian Express, 2020. 67 per cent of 92 farmer-producer organisations'

- business hit due to COVID-19 lockdown: Survey
<https://www.newindianexpress.com/business/2020/may/26/67-per-cent-of-92-farmer-producer-organisations-business-hit-due-to-covid-19-lockdown-survey-2148260.html>
- The Hindu, 2020. Indian economy contracts by 7.5% in Q2.
<https://www.thehindu.com/business/Economy/indian-economy-contracts-by-75-in-q2/article33193753.ece>
(Accessed on 28th November, 2019)
- Trebbin A. and Hassler, M. 2012. "Farmers' Producer Companies in India: A new Concept for collective action?"
Environment and Planning A, Vol. 44, pp. 411-427.
[https://www.researchgate.net/publication/227472660_Farmers'_producer_companies_in_India_A_new_concept_for_collective_action]. (Accessed on 28th July, 2019)
- Wilson G, 2009. "The spatiality of multifunctional agriculture: a human geography perspective"
Geo-forum 40 269 – 280.
https://www.academia.edu/28966916/The_spatiality_of_multifunctional_agriculture_A_human_geography_perspective (Accessed on 30th July, 2019)