The agriculture systems in India have **twofold responsibility**. It must ensure adequate nutritious food for all citizens, now and in the future; at the same time, agriculture sector must cater to the economic needs of 60 per cent of the population, who directly depend on this sector for their livelihoods (Arjun, 2013). Both these responsibilities have to be performed in a challenging scenario where food demand is increasing more rapidly than agriculture productivities, where resource base available for agriculture is shrinking due to resource degradation, overuse and competition from other developing sectors. Climate change further worsens the situation with its impact on the natural resource base and adverse effect on agriculture productivities.

The **small holding character** of Indian agriculture is also much more prominent today than even before. The Indian agriculture production system is trending towards continuous fragmentation of land. Nearly 88 percent of the farmers have less than 2 hectares of land, and account for about 44 percent of the operated area (NSSO, 2006) contributing about 51 percent in the total value of agricultural output (Srivastava, 2008). Small farmers, generally witness situations of limited resource accessibility, low resource efficiency, low agriculture productivity, high climate risk, low incomes from the food production. This is not just a concern for India’s food security but also puts forth a challenge on the economic viability and environmental sustainability of the agriculture systems. Some of the common concerns faced by small farmers\(^1\) include high production risk (susceptibility to pest attack and climatic adversities) and price risk associated with imperfect markets. Lack of access to resources (natural resources & financial assets), inefficiencies in using available resources coupled with inadequate market and crop knowledge often restricts shifts to new enterprises and investments options in agriculture available in market. (Gulati, Joshi, & Landes, 2008).

\[^1\] Small Farmers refer to farmers with less than 2 hectares of land in this context.
With the trend of land fragmentation over the years (see graph above) and the growing demand for food and increasing environmental concerns, the challenge that this trialogue2047 aims to identify innovative solutions that are efficient, competitive, environmentally sustainable and also ‘inclusive’ in terms of working with small holders on sustainable basis.

Community models in agriculture offer an opportunity for small farmers to increase their productivities, incomes and resource efficiencies. Community Agriculture Models, in its simplest of definition is “an arrangement of resource (land, water, human, finance, etc) pooling by farmers at different parts of the value chain for increasing agriculture productivity, farmer incomes and ensuring sustainable resource use”. There are many such models that can be found performing different roles across the value chain of the agriculture system:

There are farmer groups and farmer clubs who usually assist the farmers in providing with knowledge of research useful for the farmer and thus help him evaluate different technologies and choose and practice most suitable for him. Such models are practiced and promoted by various organisations working with small farmers like Development Alternatives, Watershed Organisation Trust.

Community models are also seen at the stage of performing agriculture practices. There are various initiatives by Wassan, Pravah that enables land, water, inputs, human and finance sharing amongst farmers leading to higher production, higher resource efficiency from agriculture land of small farmers.

Various forms of community models are also popular at the next step of the value chain which deals with communicating the value of the product. Farmer cooperatives and farmer producer companies aggregate outputs from agriculture production for value addition and ensure higher incomes for farmers in this manner. The SahajaAharam Producer Company Limited, initiated by efforts of Centre for Sustainable Agriculture is one such initiative that aggregates produce from various farmer collectives to reach to wider market and has thus raised incomes of the farmers. Some retailers and processors, such as Field Fresh, Pepsico, and Nijjer, have contractual buyback arrangements with the farmers that specify quantity, quality, and a pre-agreed price. Some retailers are also developing the concept of business hubs to reach out to farmers, including DSCL HariyaliKisan Bazar, TATA KisanKendras, Godrej Aadhaar, and ITC e-Choupal and ChoupalSagar.

This trialogue2047 aims to explore the role of such community based models in building resource resilience, livelihood resilience in the agriculture systems while ensuring food security. Some of the questions it seeks to address are:

- What are the economic and environmental costs and benefits involved in different community based models and what is their contribution in food security?
- How do community-based agriculture models ensure livelihood security of small farmers who are contributing substantially (around 40 percent) to the food production of the country?
- What kind of policy interventions can create conducive economic environment to enable development of community based models to support small farmers?