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Closing policy gaps to enable agripreneurship of smallholder farmers in developing countries*

Raymond Saner** and Lichia Yiu with Shaun Roberts

Raymond Saner, Director, Prof. Titular, University of Basel, Switzerland, Director, CSEND, Geneva, 4, place des Alpes, 1201 Geneva, Switzerland
Contact: saner@csend.org

Lichia Yiu, President, CSEND, Geneva, 4, place des Alpes, 1201 Geneva, Switzerland
Contact: yiu@csend.org

Shaun Roberts, Research Assistant, CSEND, Geneva
Contact: sar329@cornell.edu

Abstract

This study investigates the broader context of smallholder farmers' operations and provides insights into the options that smallholder farmers in poor developing countries have when engaging in agripreneurial undertakings for additional income generation. Such personal agency when effective could support them to alleviate poverty, reduce hunger, and attain sustainable livelihood. Yet in practice, such personal efforts are often wrought with uncertain outcomes. Therefore an enabling policy environment is necessary to ensure the success of this strategic intervention in lifting and supporting sustainable livelihoods of rural farmers struggling with the precarity of their life situation.

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** Corresponding author. saner@csend.org

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The target population of this study were *Smallholder Farms mostly family owned agricultural enterprises.* The aim of this study was to discuss and assess the viabilities of measures and policies that could enable these smallholder farmers to grow their farm-based activities through farming and non-farming related activities. Such broadening of work portfolios of these smallholder farmers can play an important role in enriching the economic ecosystem of the rural communities and support the realization of Sustainable Development Goals.

Thirty-seven experts with track record in agriculture development in developing countries were invited to participate in this study. Thirteen agreed, giving a response rate of about 35% during the Round I.

As a second step, four experts of agriculture development in developing countries reviewed the findings of the initial group of 13 experts which were synthesized into a Concept Paper. They were then asked to provide their own views on agripreneurship development. The key messages of the second group are included in the Discussion and Recommendation Section of this report.

The sampling frame for the selection of the experts consisted of the following stakeholder groups: WTO Member States, International Organizations, Academia/ Researchers, Agribusinesses, and CSO/NGO organizations.

Participants who responded to the first round consisted of experts from two WTO member states, four International Organizations (UN/IO), two Academia/Researchers, three Agronomists, and two International Advocacy Organizations (IAO).

Participants of Round 2 included three representatives of large international NGOs and one representative of a major UN Agency. This cohort, similar to the first cohort, have many years of experience in agriculture and development in developing countries and are aware of the challenges of agricultural development and agripreneurial initiatives.

Acknowledgements

This research paper contributes to a deeper understanding of how policies can enable or hinder Agripreneurship of Smallholder Farmers in Developing Countries. Raymond Saner and Lichia Yiu conceptualized this study, selected the interviewees, designed and administrated the semi-structure interviews and finalized this publication. Shaun Ann Roberts contributed to the initial draft of this paper. The first two authors are senior researchers of the Centre for Socio-Eco-Nomic Development (CSEND), a Geneva based NGO accredited by ECOSOC in special consultative status and the third co-author was research assistant at CSEND.

Two rounds of surveys were designed and conducted consisting of a semi-structured questionnaire with open-ended questions. The survey consisted of questions pertaining to agricultural development in developing countries and the potential for skills and knowledge improvements of small holder farmers which could improve their livelihood and increase their income levels. A group of senior experts knowledgeable in the fields of agriculture and development were invited to respond to the survey questions.

The research team appreciates the valuable contributions provided by following experts:

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Context

According to the World Bank estimation, there were 500 million smallholder farming households globally in 2016 that also comprised a large proportion of the world's poor living on less than 2 US$ a day. In a more recent study in 2021, Hannah Ritchie found that 84% of the world's 570 million farms were smallholders with less than two hectares in size. Still, smallholder farms produce 29% of the world's crops (Ritchie, 2021). Even so, many smallholder farmers are some of the poorest people in the world who often have to face hunger. At the same time, the survival of small farmers is put at risk due to the trends of the agricultural sector towards industrial farming and the concentration of land ownership.

An IFC study dated 2019 further defines Smallholder Farms as a "family-owned enterprise that produces crops or livestock on 2 hectares or less while in some countries and sectors smallholdings can exceed 10 hectares". The IFC study agrees with earlier observations by John Morton (2007) that there is considerable variation how countries define smallholders or categorize farms but that smallholders in general draw on their family members labour to generate their main income even though the farming households might derive income from other sources.

Once small farmers are sure that their families can get their food from their own farming activities, they might then also add cash crop farming such as coffee, cocoa, cotton and other cash crops that generates high market value and can be converted into money (Jeffries, J, 2018). Morton also observes that household members of smallholder farms also participate in off-farm and/or nonfarm employment. Agripreneurship for smallholder farmers could include specializing in repairing food washing installations (e.g. for coffee beans), agricultural working tools (plows., fertilizer spreaders, seeders) and diversifying into eco-tourism, handcrafts and organizing community based credit systems.

However, external crises like droughts, inundations, armed conflict and other forms of man-made or natural disasters often result in emergencies that push the small farmers below the poverty threshold. Preoccupied with overcoming such crises forces smallholder farmers to re-prioritize their farming activities which in turn can bring to a halt promising developments of non-farm activities.

For instance, the triple socio-economic pressures caused by the COVID-19 pandemic, the ongoing war in the Ukraine with its negative impact on the availability of fertilizers and pesticides and the increasing exposure to the extreme weather conditions have revealed not only the underlying vulnerability of the global food security system but also highlighted the enlarged and accelerated risk of displacing smallholder farmers from the agricultural sector. Reviewing the current conditions and future of farming, Giller et al (2021a) state that "Smallholder agriculture cannot deliver the rate of economic growth currently assumed by many policy initiatives in Africa". Further analysis
revealed that the size of the land ownership has a strong relationship in achieving food self-sufficiency and a living income (Giller et al., 2021b). Reimagining the development of rural economy and empowering the small landholder farmers to achieve food sufficiency and living income are more urgent and relevant than ever before.

The challenge for any policy design and future planning work in support of agripreneurship are

finding the balance between two demands. On the one hand is to find the pathways to assist small farmers to survive the trend towards market consolidation where large scale farming enjoys greater economy of scale and by pushing the stallholder farmer into a defensive position… The other hand is to establish mechanisms to improve farm productivity and to increase revenue generation for the farmers via alternative endeavor. These are key to the survival of many smallholder farmers who remain important to ensure local food security and to maintain ecosystem security of the locality. Succeeding in identifying non-farming activities with sustainable revenue potentials is the more proactive scenario. This scenario calls for urgent exploration of alternative paths for smallholder farmers to move into a positive and sustainable future. One of such alternative paths could be through different forms of agripreneurship.

What is Agripreneurship?

Agripreneurship refers to entrepreneurship in agriculture. The concept of agricultural entrepreneurship was introduced to support farmers by improving access to the means of production and increasing market engagements (Olabisi, 2022). An agripreneur is an entrepreneur whose core business is agriculture or agriculture related activities.

According to Schoar (2010), subsistence entrepreneurs are entrepreneurs who become entrepreneurs as a means of supplementing subsistence income. The majority of agricultural entrepreneurs in developing countries are subsistence entrepreneurs (Schoar, 2010). Often, subsistence entrepreneurs do not transition into becoming "transformational entrepreneurs" - that is entrepreneurs whose aim is to create a business that will grow beyond the individual's subsistence needs (Schoar, 2010). The motivation to become a subsistence entrepreneur stems from financial and community uncertainty and often occurs in informal markets by using established social capital and networks (Viswanathan, Echambadi, Venugopal, Sridharan, 2014).

FAO adopted the term agripreneurs as shorthand for agribusiness entrepreneurs referring *to off-farm enterprises* (FAO, 2019). Other characteristics attributed to the role of an entrepreneur includes risk-taking and searching for opportunities (FAO, 2019). As a risk-taker, an agripreneur deliberately allocates resources to an agribusiness venture to exploit opportunities in return for profit (FAO, 2019). They can engage with business activities all along the agricultural value-chain in addition to activities at the primary production level (FAO, 2019). Subsistence farmers may occasionally act in agripreneurial ways, e.g. deciding to risk a longer trip to farther away market in order to maximize the selling price, or trying a new crop (even in a small scale) as an innovation. These efforts, if noticed and supported, can make a contribution to entrepreneurial development more broadly. [2]

[2] Observation by Prof. Jerry Katz, University of Robert H. Brockhaus Endowed Chair in Entrepreneurship

Agripreneurs create and generate value addition through their products and services. These additional values tend to be captured in five ways: "(1) through profits; (2) through salaries (jobs); (3) through cheaper, safer and more convenient and nutritious food to consumers; (4) by generating tax revenues that can contribute to improved (public) services, infrastructure and social programmes; and (5) by having broader positive economic, social and environmental impacts, or so-called externalities" (FAO, 2014).

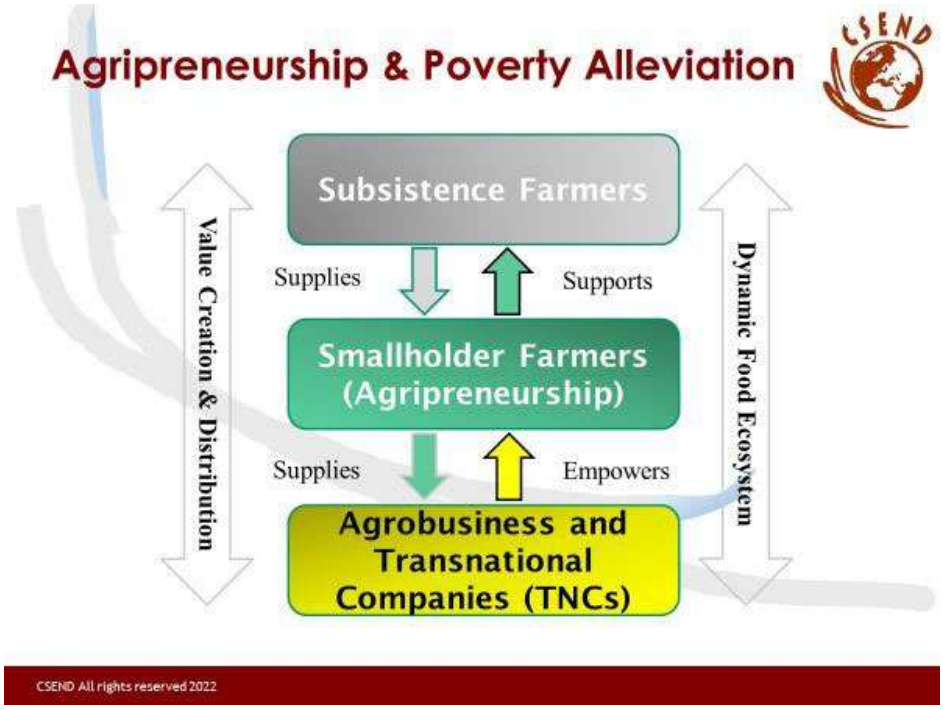
Moving from subsistence entrepreneurship to a formalized and scaled transformational form of entrepreneurship level represents a fundamental paradigm shift for the smallholder farmer. Maintaining the distinction between the two forms of agripreneurship ensures that policy interventions are targeted to the specific needs of one specific class of entrepreneur. In regard to this study, the class of transformational agripreneurship of the small holder farmer and corresponding enabling support are the aim of this study.

Development Impact of Transformational Agripreneurship

Transformational agripreneurs are essential to the rural development as well as national development by contributing to the overall economic performance of the country as well as fostering capacities toward the early stages of industrialization through adopting technology for example in food processing and conservation and transportation. In other words, transformational entrepreneurship of the smallholder farmers is a critical step to move away from subsistent farming to greater market participation and to climb up the value chain through processing and adoption of other technologies of farming related practices. These experiences facilitate the move up the learning curve including business acumen and organizational knowhow. Eventually an embryo venture can grow into agribusiness with greater scale and greater demand of workforce and talents offering employment opportunities to non-family members.

Department of Management, University of St Louis, USA

Figure 1: Smallholder Farmers and their transformational role between substance farmer and Business farmers and TNCs (authors' own articulation)



Agripreneurs adds or re-organizes his food production process. For instance, they can explore the use of new fertilizers; try out nature based farming technics; searches for more efficient use of washing and drying facilities of coffee beans together in collaboration with other farmers; diversifying seed production as complementary output to the traditional farm produce; exploring cooperation with other farmers to make more effective use of manure including possibilities to re-cycling waste; specializing on repairing farming tools and equipment for their own farm activities as well as offering to repair other farmers equipment; travel with his produce to alternative markets e.g. to peri-urban markets to broaden the range of potential buyers; adds non-farm activities e.g. offering nature based tourism opportunities. These are examples of non-farm and off-farm activities. There are many possibilities for the agripreneurs to experiment and to grow as long as the right conditions exist.

A shrinking agricultural sector and expanding Rural Non-Farm activities (RNF) are seen as being a result of economic development in general. Greater reliance on off-farm activities of income is associated with greater wealth but at the same time RNF are also found to be a source of greater income inequality (Davis et al, 2010, P.49). The authors stated "The overall importance of agriculture, particularly for poorer household, suggest that promotion of RNF activities ought to constitute a key component of any strategy (of rural development)" (P.61). Through RNF related agripreneurship activities, smallholder farmers can generate additional income. At the same time, for poorer farming households, income through agricultural activities remains important for survival and serve as a safety net. Hence agripreneurship should be a rural development strategy whereby farming and non-farming activities and related income form a complimentary holistic strategy.

Outline of study

Agripreneurs are essential for developing economies and for rejuvenating rural communities. Their enterprises generate profits for themselves, but more importantly, "they generate jobs and tax revenues, while creating critical products, services or markets for other agribusinesses (including small family farms); they improve the food supply for consumers (lower price, higher quality, new or formerly unavailable products); and generally, they have a broad-based positive impact on the wider environment in which they operate (economic, social and environmental) (FAO, 2019)."

Strengthening food systems is important for the elimination of hunger in the rural economy. FAO estimated that 710 to 811 million people faced hunger in 2020 (FAO, 2021). Smallholder farmers often live in extreme poverty and face hunger and malnutrition with a long-term development impact. They would benefit from the additional revenue streams that agripreneurship can provide. Working poverty also disproportionally affects women and youth (UNDESA, 2021). The UN estimates that 1.6 billion people participate in the informal economy, and thus do not have social safety nets (UNDESA, 2021). Agripreneurship could offer a chance for these vulnerable workers who are often too marginalized to enter the formal economy and hence cannot provide better jobs with a living income in rural communities. The study undertaken by CSEND therefore adding another facet to the understanding to this important topic.

Multi Levels of Analysis
When examining the agripreneurship development, FAO considers there are three foundational analyses to be conducted. The first level of analysis is anchored on the individual entrepreneur and their cultural environment while the second level of analysis is on the entrepreneur's network environment and social capital (FAO, 2019).

This study intends to complement the existing FAO analytical schemata as captured in the "Agripreneurship in Africa" report and emphasizes the second level or stage of business development, i.e., scaling up and ensuring sustainable growth, by reviewing the policy environment needed for agripreneurs to thrive and prosper.

In addition to complementing FAO's second level of analysis regarding business development, this study also focuses on the broader enabling policy environment including the regulatory conditions for agripreneurs. In the FAO schemata, this is considered as the third level of analysis (FAO, 2019). The objective of this study is to identify policy solutions that help increase opportunities and reduce risks for smallholder farmers to add additional off-farm or non-farm income generating activities. In other words, the focus of this study is the macro-level of policy options and the co-creation of space that straddle the micro and meso level of the policy regulatory options. A more elaborated description of CSEND's four level policy analysis is presented in Figure 1 on the page 12 of this report below.

This study *asses*ses in general terms on developing countries' policy environment which supports or hinders agripreneurship. Hence, the literature review cited below does not discuss the on-farm production of farm business activities. For the latter focus, publications like "Farming as a Business

(FaaB) Manual for Smallholder farmers" by World Vision (2019) would be a good source of knowledge.

In the past few years, there have been notable efforts in countries such as India, Nigeria to promote agripreneurship as means to uplift the agriculture sector and the livelihood of the farmers with variable success. Such effort can also be seen among the international actors.

FAO's report on Agripreneurship in Africa focuses on agripreneurs who have registered business or have entered the formal economy in some form and have achieved impact at scale in terms of sales, profit, and jobs (FAO, 2019). This FAO report identifies two challenges, one is to establish their business; the other of scaling up and ensuring sustained growth (FAO, 2019). In other words, the entrepreneurial challenges for the small farmers are related to their decision to start off-farm activities and making investment decisions of scaling and growing these activities.

Literature concerning hindrances regarding agripreneurship

The general literature and our survey have shown that without affordable and equitable access to critical resources such as other business services, technology and finance (e.g., information, training, research, development and education,), physical inputs (e.g. packaging, land, storage and natural resources), and human capital (e.g. skilled and unskilled labor), entrepreneurs in any industry will be hard pressed to make their business venture a success.

For the smallholder farmers in the developing countries, a lack of access to critical resources could constitutes a threshold impossible to overcome and result in chronical entrapment of poverty as their starting conditions have already disadvantaged them.

Need #1: Access to non-land and water related inputs and services

Referring to the topic of environmental policy related to agripreneurship, studies have been reported since the start of this millennium. One study published in 2004 by Hussain & Perera (2004) focused on the reasons for low agricultural productivity in South Asia. Their study showed that improved management of land and water is important for increasing productivity, but equally important is a farmer's access to non- land and water-related inputs and services which could be facilitated through public-private sector partnerships.

Need #2: Access to affordable credits and adequate agricultural technology inputs including learning and competence development

Other studies in this field revealed some of the hindrances causing entrepreneurial failures. A study by Nagalakshmi & Sudhakar (2013) reported failed attempts to help farmers in the Indian state of Anhdra Pradesh who lacked access to adequate agricultural technology inputs, funding and commercial farming skills. They could not meet the expenditure spent on cultivation and high rates of interest taken from landlords, commission agents, banks and financial institutions and ended by selling their land. In some cases, farmers were reported to have committed suicide.

The United Nations Conference on Trade and Development (UNCTAD) titled its report, "The Least Developed Countries Report 2018, Entrepreneurship for Structural Transformation: Beyond Business as Usual", which states that governmental policies in support of enterprises in LDCs are of key importance to ensure transformation of LDC enterprises. Such policies are needed to ensure structural development. In addition, the government should also provide venture capital (Wilson, 2018) at the rate that small farmers can access and afford. The report finds that farmers can improve their productivity if two factors are taken into consideration, namely, first, by improving the larger context, through changes in laws and access to credits to support entrepreneurship; and secondly, by increasing competencies, such as learning how to farm more efficiently and effectively through training (UNTAD, 2018).

Need #3: Digital connectivity and e-commerce

The twenty-first century is also marked by rapid expansion of the digital tools and infrastructure. Digitalization happens in all sphere of life and economic activities and offers unprecedented opportunities for business undertaking. A related study published by UNIDO and titled "Smart Agribusiness" (2021) focuses on the use of technology in agriculture such as block chain, Internet of Things, artificial intelligence, cloud computing and mobile internet (UNIDO, 2021). Smart Agribusiness as defined in the UNIDO study are digital advisories which provide advisory services on agricultural practices for farmers such as digital procurement, agro e-commerce or agro-digital financial services. Such advisory services are of growing importance in a digitalized era when productivity gains alter the competition gaining access to new markets.

Digitalization and innovative logistic management have given birth to global supply chains.

A private sector study financed by Nestlé SA focused on agripreneurship as a component of the global-supply chains. The novel part of this study is the focus on the Sustainable Development Goals that help define the international strategic context within which agripreneurs can operate. The Nestlé study identified SDG 4, Quality Education; SDG 5, Gender Equality; SDG 8, Decent Work and Economic growth; SDG 10, Reduced Inequalities; and SDG 15, Life on Land as the SDGs that agripreneurship can positively impact. The authors of the study expect that successful agripreneurship development could make a broader impact at the sectoral and national levels. Specifically, agripreneurship can positively impact the social environment through their professional activities and generate outcomes including social and economic benefits, increased net income, and sustainability (Carr, Roulin, 2016).

It is obvious that insertion into the global economy through e-commerce and other services may provide agripreneurs ample space for growth and development. Yet, such entrepreneurial opportunities however do not exist for most of the rural population when outside of the more developed areas. While estimated 2.9 billion people, or 37 per cent of the world's population have never used internet (ITU 2021), disparity also exists in urban and rural population. The lowest access rate of the world is estimated at 15.1% in rural Africa, while the highest access rate estimated at 80% in rural Europe with 39% in rural Asia & Pacific (Statista, 2022).

Research Question

The research question of this study focused on policies that promote starting up of entrepreneurial initiatives of smallholder farmers and for scaling up their off-farm activities once overcoming the initial learning and adaptation. In other words, this study aims to find out the broader enabling environment for *starting up* and for *scaling up*. The broader enabling environments include finance, infrastructure and legal regulations that determine the business or startup friendliness and readiness of an economic system.

A country's physical infrastructure, e.g., information and community technology, roads, electricity grids, and water, as well as the regulatory, legal and policy environment provided in special economic zones with support of intellectual property laws might also add to the ease of doing business regardless of specific locations or scale of operation of the business. Socio-cultural dimensions such as national history, religion and cultural traditions also help shape the enabling environment and the rights to participate in existing economic opportunities. Therefore, the inclusiveness of a policy environment is a tacit element of any economic system and business condition. Due to the limitation of this study, reviewing the inclusiveness of a society which ensures equal access to economic and other development opportunities in the sense of Amartya Sen's conceptualization is outside of the scope of this study. Rather, the research question addresses the availability of access which supports the success of agripreneurship.

It is accepted that with the support of advanced knowledge and modern knowhow, smallholder famers could also contribute to the mitigation of natural disaster by combating desertification and protection of biodiversity. Such "job enlargement" can occur through the adoption of green farming methods, generation of renewable energies and by approaches that generate essential bio-services which strengthen the overall ecological security of a territory. This additional dimension may add value and income through the application of quality control, certification, marketing and special distribution channel, all related agri-business in the value chain. When the threats of climate change and consequent desertification, flooding, loss of biodiversity are accelerating and engulfing more communities, this study will contributing to the transformation of smallholder farmers from passive victims to active development workers by highlighting the policies needed that should and could be extended to cover the smallholder farmers in more remote and isolated communities and support their development.

The G20 leaders articulated the importance of agriculture in their Build Back Better agenda at the Riyadh Summit in November 2021, The G20 leaders' Declaration endorsed the G20 Riyadh Statement to Enhance Implementation of Responsible Investment in Agriculture and Food Systems (G20 Riyadh RIAFS Statement) (G20 Leaders, 2020) by stating the needs to increase in investment in order to improve small-scale farming, tackle rural poverty, develop infrastructure, generate decent work, promote gender equality, and protect the environment, biodiversity, and natural resources (G20 Leaders, 2020). This vision resonates with and captures the broader perspective of this CSEND study.

Conceptual Framework

Agripreneurship can be a potent means to achieve the UN's Sustainable Development Goals. Specifically, agripreneurship can contribute to improve SDG1 No Poverty, SDG 2 Zero Hunger, SDG 8 Decent Work and Economic Growth, SDG 15 Life on Land and SDG 10 within Country Inequality. However, the practice of agripreneurship is embedded in a larger global context consisting of different layers which can all impact agripreneurship positively or negatively.

Taking into account the concepts and propositions related to agripreneurship described in preceding sections of this report, the following multilevel analytic framework is proposed (see Figure 1) consisting of Micro, Meso, Macro and Meta levels. The four levels are described below in more detail. They are defined as follows: 1. Micro-agripreneurship, 2. Meso- agribusiness, 3. Macro- agri-politics and 4. Meta - agri global governance. Significantly, between the micro and meso level, a linking function supports the transformation towards entrepreneurial initiatives. This linking mechanism consists of the development of a co-creation space and enables mutual support and learning amongst farmers and within farming communities. These intermediary linking functions need to be explored and captured through deeper insights and dialogues amongst stakeholder groups.

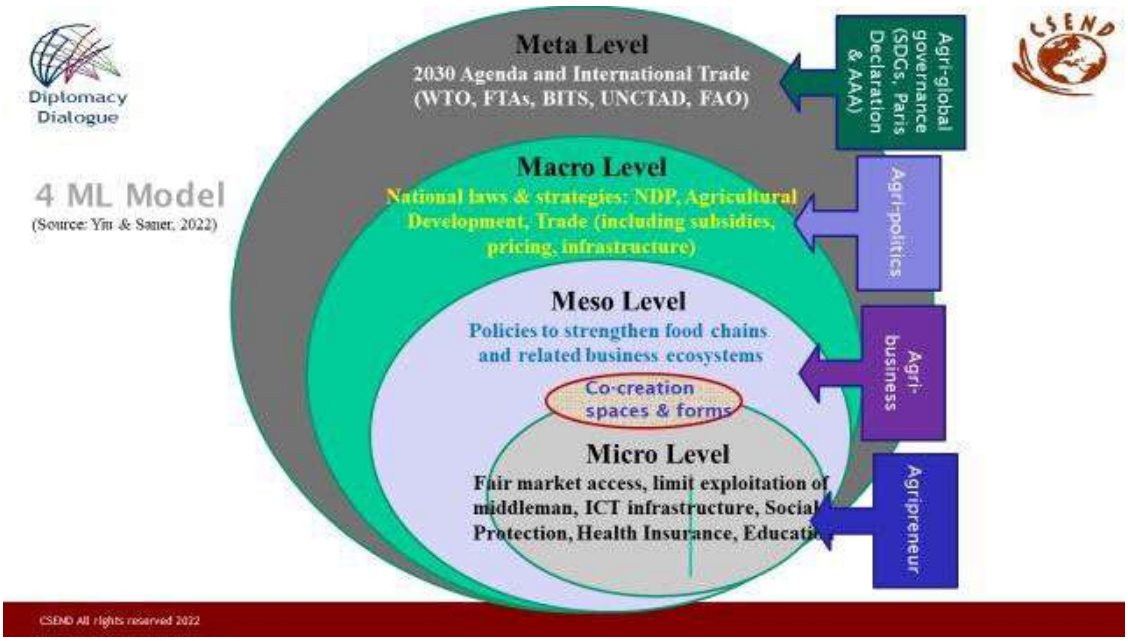


Figure 2: Framework to Address the Policy Interventions at Different Systemic Levels (Adapted from Saner, Yiu & Lazzaroni, 2021)

Annex 2 offers an analytical grid that provides guidance as to how the 4 levels of analysis relate to agricultural policy in general and to agripreneurship in specific. This analytical grid also clarifies which identified problem corresponds to what level and hence what kind of solutions might be the most appropriate and most effective solution to counter bottlenecks and access issues. . The four-level analysis offers the possibility for designing a systemic and integrated policy mix by seeing visibly the input-output linkages, trade-offs and blind spots.

Micro level: Agripreneurship - consists of two components namely: a) the smallholder farmer and his/her subsistent and mostly informal entrepreneurial activities and b) the farmer's agricultural productivity. The latter can be intensified through interactions between the smallholder farmers and the local for instance by creating proximity food fairs or food markets for smallholder entgerpreneurs only (not for agro-business companies nor for food TNCs). Such public food markets with permanently constructed food stands could function like an airport hub. The hubs being the landing or anchoring place where airplane dock. Food markets could offer similar hubs where farmers could install themselves temporarily to offer their produce.

With agripreneurship policy support provided by the local authorities, agripreneurs might also be able to move up the value chain and achieve product diversification and non-farming-based income generations. The accompanying policies need to address the often-existing literacy gaps and knowledge gaps, especially by adopting more advanced farming methods and access information outside the farm and social networks. It goes without saying, policies to support agripreneurs would be non-exploitative and non-discriminatory which include tax systems, social protection and insurance, education and health services, and transparent and accountable rules and regulations.

Meso level: Agri-Business - policies that strengthen existing and emerging food chains, e.g., can be ecologically sound farm products, and related business ecosystems (for instance agribusiness ranging from brokering, advising, R&D, marketing, logistics, deal making and financial services). This is the space for greater scale and differentiation of agripreneurship activities. Meso-level policy relevant issues can be the prevention of discriminatory issuance of licenses sometimes required for getting permission to access local markets, prevention of anti-competitive practices like price fixing, enforced market arrangements that bind small farmers to middlemen and preventing small farmers from getting access to purchasing of agriculture inputs like fertilizers.

Macro level: Agri-Politics- pertains to divergent and convergent stakeholder interests and political objectives of the governments. They all compete directly or indirectly for policy priority and resource allocation e.g. deciding to allocate subsidies or market facilitation to large industrial and transnational agricultural enterprises or instead allocate subsidies and preferential regulations to regional and small local organizations such as smallholder groups, agricultural cooperatives and consumer protection associations. Inclusive agricultural policies need to strive toward embedding domestic and international investors in an effective and transparent policy framework regarding access to agricultural infrastructure and to provide protection of smallholder farmers from market distorting practices of powerful food retailers; for instance, by preserving minimum bargaining space for the smallholder farmers. Bargaining power in regard to farming inputs such as fertilizers, seeds and pesticides and conservation of natural resources, i.e., water, land, biodiversity and forestry are essential to improve the living income of small farmers. Policy measures that reduce vulnerabilities of the farmers should also be included by providing emergency assistance at terms of natural catastrophes (inundations, draught, bushfire, and pests/insects). Conflicts over land use, when land tenure is not secured or protected, can be a major disruptor for the poor farmers and prevent them from taking a longer-term view of the conditions of the land, surrounding environment and ecosystem.

Meta level: Agri-global governance- concerns the global governance system, such as trade, climate change, biodiversity, that impact agricultural development and regulating transborder trade in agricultural products. Concretely, multilateral and regional trading rules are set to limit agro-industry oligopolies of transnational food companies concerning imposed restriction of market access. This policy restriction is prevalent for instance in some agricultural commodity markets. The impact of agri-global governance systems should be reviewed and reformed to assess whether they benefit all. This is particularly urgent in light of the global ambition of the 2030 Agenda for Sustainable Development and the promise to "leave no one behind". Key factors of sustainable and equitable agricultural farming are transparent rules of bio trade, preservation of biodiversity, safeguarding food security in poor LDCs and developing countries and agreements to ensure sustainability of the agricultural sector at local, regional and global levels.

Co-creation spaces- As mentioned before, a linking mechanism needs to be put in place between the two layers, i.e., micro and meso, in order to achieve coordination and synergy. Therefore, this study focuses on the policy environment of Micro level- agripreneurship of smallholder farmers and on the overlap between the Micro and the Meso level (functioning of agricultural markets, transparent and non-discriminatory food distribution system and transparent pricing of food retailers, and sustainable agricultural eco-systems and services). The overlapping area of interactions between the two levels of the system (as shown in Figure 1, page 12) is considered critical in energizing the current state of local food chains.

A way to generate constructive and innovative interactions between the Micro-and Meso level in agriculture can be achieved through co-creation and mutual learning. In a co-creation effort, multiple stakeholders come together to develop new knowledge and practices that could be beneficial for all stakeholders, consisting also constructive interactions between stakeholder across a value chain. Expanding agripreneurship from individual to that of community and greater integration of supply and value chains strengthens the innovative potential of the agripreneurial ecosystem within the territory (Ramaswamy, 2011).

Gouillart & Hallet (2015) gave an example of co-creation in the agricultural sector by the Indian conglomerate ITC who launched a co-creation initiative, "e-Choupal" (electronic marketplace in Hindi), which was to replace the traditional sourcing process with an approach that involves assembling farmer groups in each village and providing each group with digital tools that deliver timely market data as well as locally relevant information on agronomic best practices. For farmers, this approach resulted in significant yield improvements and improved economic conditions.

To demonstrate what the co-creation method can achieve, let's first consider how it has begun to transform certain parts of the business world. Take, for example, the agriculture and food value chain. In the traditional model, each link in that chain is essentially transactional: At every stage of production and distribution—from selling seeds to retailing packaged foods—the interaction between participant's remains limited to the buying and selling of products or services, and the role of each participant stays within well-defined boundaries.

In the past 15 years, however, some of these stakeholders have developed new forms of

interaction that blur the boundaries between them and turn a transactional process into an interdependent ecosystem. In doing so, they are following the path of co-creation. For an illustration, see the footsore hubs, micro-level, and p 11. A few companies, in fact, have taken that path as a matter of deliberate strategy.

Through purposeful co-creation, new arrangements can be agreed which could correct potentially outdated business models, unfair business relationships and destructive market failures. For instance, strengthening existing cooperatives and supporting the creation of new cooperatives or other co-ownership arrangement could be achieved through pooling tangible and intangible resources to improve efficiency and productivity be this for more effective agricultural production, processing, or distribution of food products.

Agricultural Cooperatives pooling the views and information of their members can also become more aware of market conditions in the regional and global food markets and engage in cross-border trade of food products. Examples of international trade by cooperatives was presented at the Aid-for-Trade conference by ILO, ICA and CSEND in 2015. Co- creation also includes community development in the rural area through solidarity-based partnerships horizontally between farmers or diagonally across sectors including rural-urban forms of partnership or alliance.

While the concept of agripreneurship has been developed by several organizations described in the literature review section above and different solutions have been proposed to improve the livelihood of smallholder farmers through entrepreneurial initiatives and innovations, the need to scale in numbers of agripreneurs and to build implementation capacity necessitates system knowledge about how this transformation from farmer to agripreneur can be undertaken and incentivized across policy levels.

Research Method

This study intended to build a collective knowledge base on how policies may support the small farmers and group of farmers to be able to broaden their on-farm and off-farm activity and explore how agripreneurship activities could be complementary to their traditional farming activities.

The research method used consisted of creating a panel of selected experts that were invited to provide their perspective based on a semi-structured survey and open-ended questions. In addition, responses were not averaged out through quantitative statistical methods. Instead, descriptive methods were used to preserve the raw data provided by the respondents including verbatim citations of messages.

For this study, a questionnaire was sent to invited participants by email who then filled out the questionnaire to their own discretion. Respondents were asked the following questions:

1. In your opinion, what agricultural policy interventions are likely to support sustained agripreneurship in the rural areas and provide economic opportunities, also for the younger generations in developing countries?

2. From your experience, what are the major barriers inhibit rural development and agricultural productivity in developing countries?
3. In your opinion what type of services in agriculture could promote greater income generation through agripreneurship or business development for the small farmers or young people?
4. In an ideal world, what type of business development or entrepreneurial initiatives in the rural area might achieve agricultural sustainability that FAO should initiate or support especially where younger generation might contribute and benefit?
5. In your view, what existing partnerships in the context of SDGs could contribute to higher value creation of the agriculture products? Or what are the new partnership arrangement that FAO should consider?
6. In your view, what cross-border arrangements are needed to facilitate exporting of the agricultural products and services that could privilege the least developing countries?

A list of experts from the agriculture and development community consisting of government authorities dealing with agricultural affairs, agricultural trade associations, civil society organizations and academic researchers, were identified by the FAO and CSEND. Thirty-seven experts were invited to participate. Thirteen responded by sending their responses, giving a response rate of approximately 35%. A breakdown of the respondents by stakeholder groups is presented in Table 1.

Table 1: Breakdown of Round 1 of participants of this Study (N=13, 35% Return Rate)

WTO member states representatives	2
International Organizations (UN/IO)	4
Academia/researchers	2
Agronomists	3
International Advocacy Organizations (IAO)	2

In a second step, additional four experts were invited to review the survey answers that were provided by the 13 experts of Round 1 of this study. The four additional experts consisted of 3 representatives of large international advocacy organizations and one representative of an UN Agency. The results of the Second Round survey results are summarized in the section before the conclusion section of this report. Details of their responses were recorded in Annex 3.

a) Results of Round 1 of the study

Seven key themes have been extrapolated from the responses provided by the experts. Table 2 provides a summary of these themes, the number of respondents who mentioned specific themes and a representative quote is given to illustrate the responses. The number of respondents mentioned in the specific column includes the respondents who identified the respective key theme.

Table 2: Principal Categories of Themes Identified by the survey respondents based on the frequency count of mention

Themes (by order of frequency)	**Number of References by Respondents (unique count)**	**Representative Quotes**
1. Access to credit/Finance	10	"Access to finance so agripreneurs can invest in building their businesses and growing/diversifying incomes streams"
2. Youth Development/ Engagement	8	"Youth entrepreneurship programs are critical to facilitate value-addition and industrial upgrading"
3. Access to Education	8	"Investment in extension services and agriculture vocational programs, especially geared toward women and rural youth"
4. Access to Markets	7	Extension to support this diversification as well as access to markets"
5. Information Exchange/Technical Assistance	7	Support to communication networks that ease direct access to and exchange of information (e.g., current commodity prices, buyer contacts, supplier and services contacts) by farmers, namely online via internet"
6. Climate Resilience/ Sustainability/ Green economy	6	Incentivizing the production of sustainable methods of production"
7. Access to Digital Infrastructure	4	"Investing in infrastructure, especially digital services, to expand access to markets and encourage e-commerce"

The themes that emerged from the responses given by the panel experts are presented in the order of frequency. The most commonly discussed theme is listed as theme one and the rest follows. There were themes which garnered less than 4 respondents were not included in this analysis.

Theme 1: Access to credit/Finance (figure 3)

This theme received most discussion by the respondents. Ten respondents discussed it in their answers and all five stakeholder groups addressed it, as shown in figure 3. An Agronomist noted an important policy intervention of "support informal sector actors to transition into the formal sector through tailored regulation and figure 3 improved access to credits." This policy intervention can support most of the smallholder farmers in the rural area entering in and succeed with entrepreneurial initiatives.

Figure 3

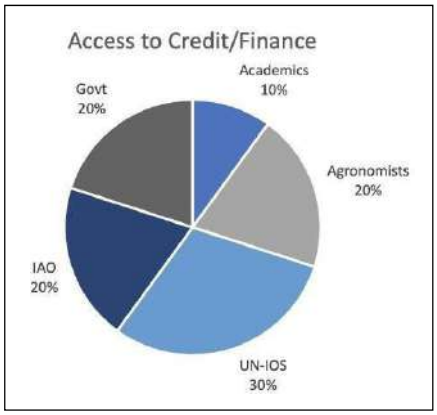
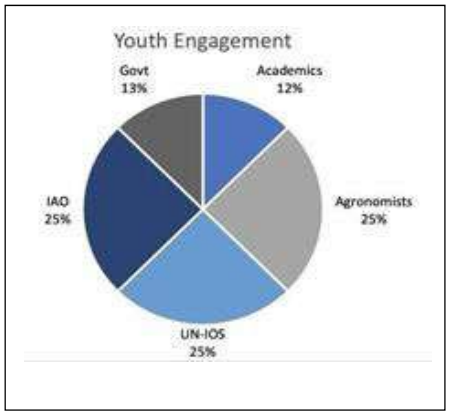


Figure 4

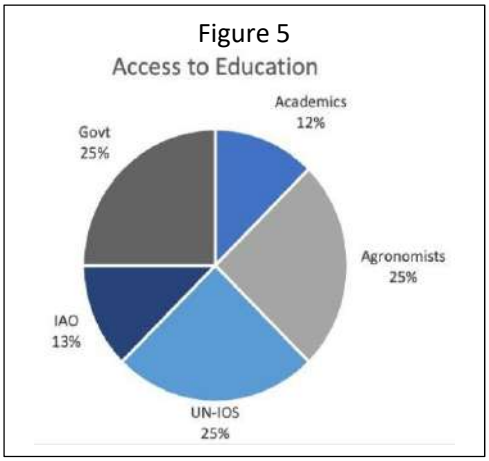


Theme 2: **Youth development and engagement** (figure 4) All five stakeholder groups identified this theme of youth development and engagement as a priority, as seen in figure 4. Respondents discussed the importance of combating the outward migration of rural youth and creating jobs in the rural economy.

Theme 3: **Access to education** (figure 5)

Different stakeholders mentioned different perspectives regarding the need for education. Some advocated specific education for the youth and for girls while others advocated vocational training. A UN/IO member highlighted "linking education courses to the needs of the agri- food private sector and ensuring high-caliber instruction in VET (institutions), Universities and incubators." An agronomist wrote about the need for "investment in extension services and agriculture vocational programs, especially geared toward women and rural youth."

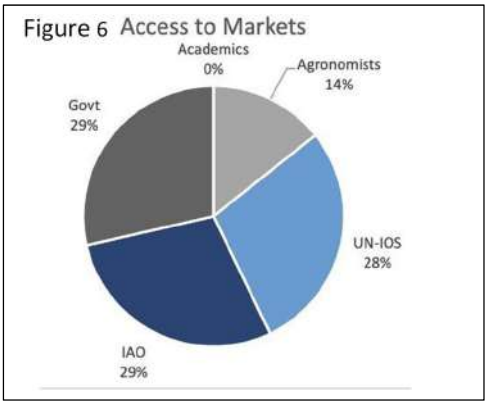
Figure 5



Theme 4: **Access to markets** (figure 6).

This theme was brought up in relation to access to market information as well as the opportunity to sell directly to market without the middlemen. For example, an IO wrote "extension to support [diversified crop systems with higher-value crops such as fruits and vegetables] as well as access to markets and [actors] interested in purchasing new crops from smallholders."

Figure 6 Access to Markets



Theme 5: Information exchange online and technical assistance (figure 7).
An agronomist wrote that a necessary policy intervention should "Provide support for communication networks that ease direct access to and exchange of information (e.g. current commodity prices, buyer contacts, and supplier and services contacts) by farmers, namely online via internet." Another agronomist wrote that a business development or entrepreneurial initiative that would benefit rural development is to disseminate accurate information about innovations in research and development. The agronomist believes that improved knowledge and innovation transfer will support the adoption of technology in agriculture. The adoption of technology in agriculture can "improve production efficiencies and the production of safe food, including decreasing farmland NPS pollution, improving water use efficiency (irrigation) and environmental protection, rehabilitation and conservation."

Figure 7

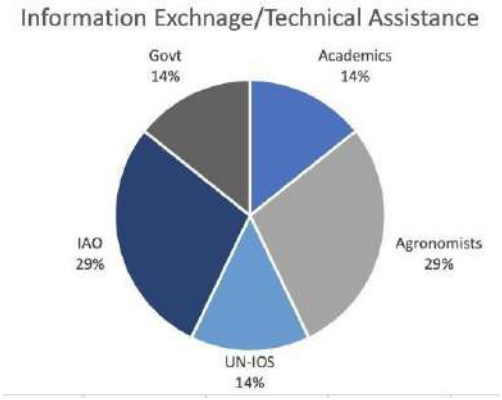
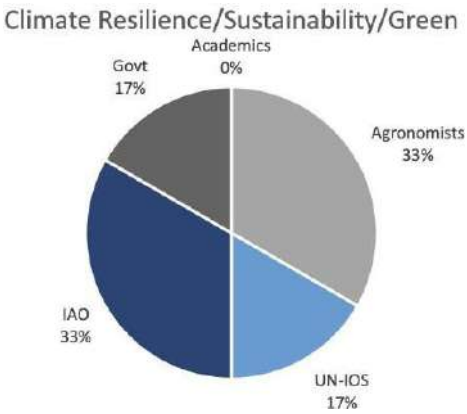


Figure 8



Theme 6: Climate Resilience/Sustainability/Green Economy (figure 8)

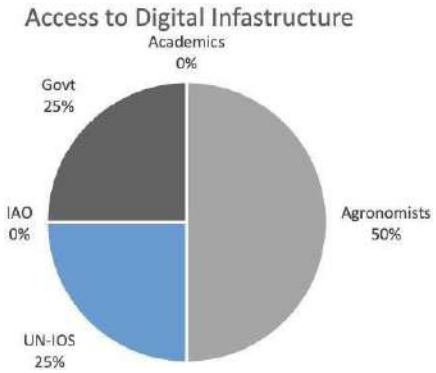
There are significant opportunities for innovation and value generation in transiting to sustainable practices. An IO representative addressed the environmental and personal economic value in farming by using "diversified crop systems with higher-value crops such as fruits and vegetables." A different IO representative wrote about the income-generating activity associated with green practices such as "layer cropping, apiculture, mushroom culture, organic and natural farming."

An agronomist wrote, "Teaching and promoting environmentally sustainable agricultural practices such as more efficient irrigation, reduced tillage, and optimal crop spacing." would help farmers to increase the land productivity without negatively impact the environment. A government official also proposed "incentivizing the production of sustainable methods of production, setting up a label system that recognizes quality of the products and can offer higher revenue." In light of the drive toward climate resilience, sustainability and green economy, opportunities for policy interventions and entrepreneurial initiatives are plentiful. These policy interventions and entrepreneurial initiatives may help both the country and the smallholder farmers in moving up the value creation ladder. In the meantime, these smallholder farmers may also get compensated for the bio service or ecological services that they provide which are tendering not only their private landholding but also strengthen the health of local ecosystems.

Theme 7: Access to Digital Infrastructure (figure 9)

This theme was brought up in relation to the connectivity dilemma and e- commerce. Agronomists emphasized the value of facilitating ecommerce and developing rural E-incubation or rural business centers (acting as agripreneur business mentors for improving the efficiency of urban-rural market linkages and related value chains)." However, a government official noted that "people of developing country in the most remote areas face difficulties in dealing with technology," so technical assistance and education would have to accompany technical solutions in order to catalyze a sustainability culture and consciousness.

Figure 9

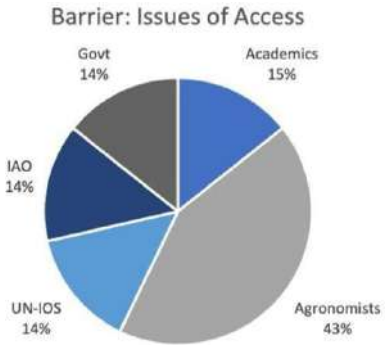


Major Barriers Inhibiting Rural Development and Value Creation (Figure 10)

When asked about the major barriers that hamper rural development and agricultural productivity in developing countries, the issues over access emerged again. The breakdown over issues of access can be found in figure 10. The group of Agronomists voiced strongest concern in this regard.

A panelist from an International Organization described these access barriers as "access to technology, access to finance, access to fertilizers, and access to markets. One of the underlying causes of these access is (insufficient) infrastructure development: energy sources, roads and interconnectivity." This sentiment is also reflected in other answers.

Figure 10



The breakdown of responses given by respondents was based on profession and institutional affiliation of respondents who identified access as a major barrier can be found in Figure 10. The tables in the annex reported responses in verbatim as well as information on proposed policy interventions, entrepreneurial initiatives, and possible services corresponding to the barriers identified.

Discussion and Recommendations based on the results of Round 1

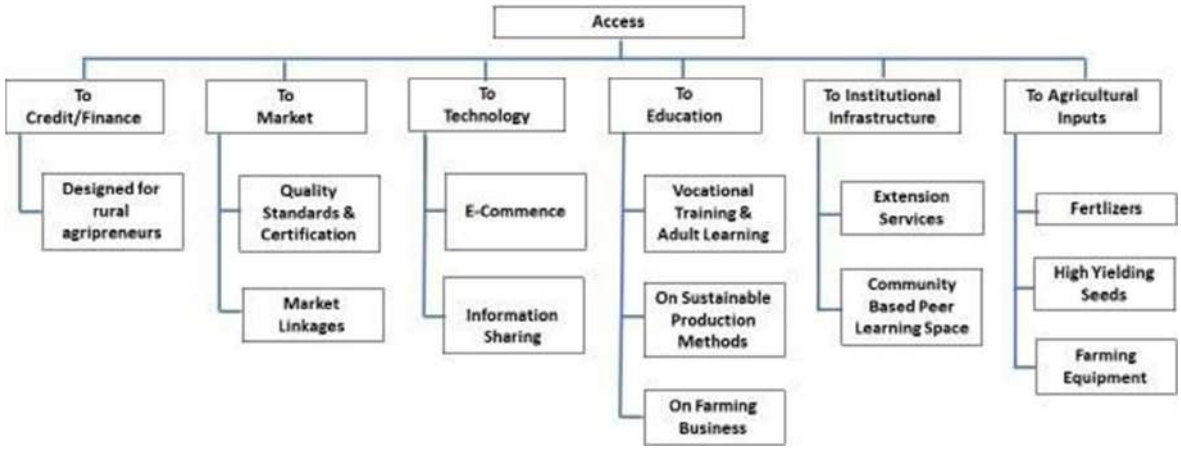
The smallholder farmers' potential to become agripreneurs is limited by the social, political, and economic barriers they have to face and overcome. To assess the probability of empowering smallholder farmers with greater capacity for self-agency and autonomy, the following observations based on the respondents' feedback can be summarized by using the 4ML model presented in Figure 2.

The main findings of this study, to a great extent, reflect similar observations of the existing literature and recommendations, especially from the FAO. However, such comparison raises the crucial question concerning the action capabilities and competencies of governmental institutions that are needed to transform existing knowledge and create the appropriate policy mix for impactful actions.

In other words, further discussions are suggested by the authors of this study to clarify what and where are the knowing-doing gaps that exist at different levels, from individual agripreneurship, to institutional facilitation and to regulation and policies that are meant to ensure inclusive access to targeted public services for agripreneurs.

The selection of appropriate policy choices is at the core of policy making needed to solve the access dilemma of agripreneurs. Figure 11 illustrates the breakdown of access requirements concerning agripreneurs faced with limitations of access to key factors of agripreneurship.

Figure 11 Essential Access for Agripreneurs
(authors' own articulation)



(Authors' own articulation)

Agripreneurship is one of the means to strengthen the personal capacity of smallholder farmers to improve their livelihood. Farmers will need to become the agent of change provided their environment is supportive and assists them to enrich their knowledge and skills.

Agripreneurship interventions can be understood through the Meta, macro, Meso, and micro level of analysis. This study breaks down the different levels of interventions. Annex 2 provides additional information on this study's discussion topics, their associated pillars of innovation and the level in which the intervention will need to occur.

- **Inputs needed at the Micro Level to enable smallholder farmers access so to nurture the right mindset and agripreneurship acumen**

At the individual or micro-level, the crucial factor prohibiting agripreneurship is the many forms of "access" limitation that smallholder farmers have to face and cope with. Without the possibility to enjoy and exercise different aspects of the *right to access*, rural agripreneurship will remain subsistence farming bound to the conditions of local markets where purchasing power of the local residents are limited due to poverty and scarce financial resources.

Many aspiring agripreneurs suffer from lack of access. They require access to agricultural inputs, such as fertile seeds and organic fertilizers; finance, such as credit and insurance schemes; market information; and technology.

a. Access to information and technology

Lack of access to market information limits their options in acquiring needed inputs and making more cost efficient and effective decision making. Another respondent highlighted how crucial it is that farmers have access to updated information from innovations in research and development so they can make the most informed production and investment decisions.

Access to information is also hindered by the digital divide. Although smart phones have closed many of the communication gaps, smart phones and communication apps cannot fully substitute the benefits and advantages of internet access and connectivity. Therefore access to affordable digital infrastructure and digital literacy education and related know how the basic empowering factors are in the 21st century. Without such access, it will not be possible for most of the smallholder farmers in developing countries to maximize the value of digitalization for the agricultural production, sales, and marketing know-how.

To incentivize agripreneurship through diversification and new product and service along the agricultural supply and value chains is an essential condition for a successful agricultural uplift through added value creation. Yet this has to be coupled with continued education of the farmers so that their level of farming competences and business knowledge are strengthened in addition to better comprehension of the market. These needs to be done through policy interventions.

b. Access to markets and multifunctional farming

Meaningful market linkages need to occur for the farm products and services and there needs to be significant investment in institutional infrastructure. Specifically, the creation of national technological infrastructure, minimum price regulation, and multifaceted extension services & knowledge sharing. Such investment requires also an appropriate policy response at the macro level. Where and how to mobilize the necessary resources to meet these demands remains contingent on circumstances. Besides official development assistance, non-state actors have been actively participating in the development of critical infrastructure and creating educational opportunities for success. However, these interventions tend to be piecemeal and limited in coverage. Additional momentum to close the gap can be sought through bottom up participation. Self-organization of farmers through agricultural cooperatives can accelerate peer-to-peer learning, information sharing, and problem solving.

This study recommends policies and actions to facilitate smallholder farmers entering diverse markets. Services like agroforestry and crop diversification have immense environmental value and have the potential for providing additional income (Elder, Wilkings, Larrea, Elamin, Fernandez de Cordoba, 2021). A respondent notes the importance of product diversification as a strategy that could improve the quality of products as well as generate additional income.

Farmer cooperatives can help share the risks and help ensure that enough food is grown locally to meet needs, but also enable farmers to focus on a couple of cash crops so that they can better target their information gathering and marketing efforts (although it can also increase risk of crop loss when a specific infestation or blight occurs.

Another form of shared and collective farming and task sharing could be done through an agricultural cooperative. For instance, composting could be done by some farmers who specialize in this to reach upscaling and free other farmers of an agro-cooperative to spend their time on more profitable use of their own lands and generate income that could benefit other agro-cooperative members. There is entrepreneurial potential as well in composting or other farm waste recycling programs (Elder, Wilkings, Larrea, Elamin, Fernandez de Cordoba, 2021). Composting can help rejuvenate the farmers' soil and has the potential to be another product they can sell. This exemplifies the idea of circular agriculture. This recommends that eco-service (multi-functional agriculture) be factored into commodities' retail price.

c. Access to economic opportunities by women and youth in rural areas

Studies have identified barriers specific to female and youth entrepreneurship (Hechavarría & Ingram 2019, Saner & Yiu, 2019). For women, common hindrances are often mentioned, i.e., high share of household work and care duties and other sociocultural constraints, poor access to finance and fewer legal rights, lack of appropriate business skills and education, lack of role models, mentors and networks, and lack of gender sensitive policies and programs. For youth, similar barriers were noted. In addition, youth face barriers such as lack of appropriate skills and education and weak administrative or regulatory framework and property rights (Phillip L & Pereznieto, P, 2016).

While this study did not go into detail about the gender differentials, it is important to note that it is more difficult for women to become agripreneurs. For example, in lower income countries,

households usually only have one bank account, and it is in the name of the head of the household. It is very difficult for women to obtain credit if they do not have a bank account, or any property rights. Examples from India point to women's self-organization of partnerships with the banking sector to establish parallel credit associations (Women's World Funding, 2019) to unblock this trading barrier.

Lack of appropriate business skills and education, and lack of gender-sensitive policies and programs have discouraged women entrepreneurship. The Women's Entrepreneurship Report 2020-21 found that "women are over-represented among the most vulnerable small and new businesses: those that are more susceptible to market disruptions and economic shocks." Gender equity is an important focal point of agripreneurship and economic empowerment through related initiative can improve inclusion and betterment of women through agripreneurhsip.

Ensuring equal access to economic opportunities must include special provisions to empower both women and youth to enjoy literacy skills and learning capacities. In this regard, competence and confidence tend to determine the actual use of such access. The major challenges affecting youth include limited access to land and premises; limited access to financial services; limited knowledge, skills and work experience; and limited access to markets (both input and output markets). Although these challenges may also apply to adults, youth are more likely to face and be susceptible to them[3]. (Ose, Y, 2021)

d. **Access to quality Education and Training**

Education in agripreneurship means education provision across board- be that for male, female, youth or adult small farmers for instance training in modern farming, using technology, scaling-up businesses, leveraging personal and electronic networks wherever feasible and possible.

Two respondents spoke about the need to link the curriculum of educational programmes to the needs of the agri-food private sector needs. Several respondents noted the importance of gearing vocational training programs towards underrepresented groups, like women and minorities.

In addition to the FAO IPPM programme, investment in skills development and education, especially in rural areas, would be beneficial. Small scale farmers need to be educated on sustainable production methods, provided with vocational skills, and technology skills (Elder, Wilkings, Larrea, Elamin, Fernandez de Cordoba, 2021). There should be incentives for farmers who use nature-positive agricultural practices and preserve biodiversity and crop genetic diversity (Elder, Wilkings, Larrea, Elamin, Fernandez de Cordoba, 2021).

The education and training must also address digital literacy. The UNIDO Smart Agribusiness reports points to digital literacy training and education as a condition required for enabling smart agribusiness. This can occur at a basic level, such as learning how to use a mobile phone or check the weather station, or at an advanced level, such as using satellite imagery to plan fertilization (UNIDO, 2021).

- **Inputs needed at the Meso Level to promote friendly Ecosystem for Agripreneurship**

Agripreneurship occurs in a broader rural context and needs to be understood through that lens. For instance, agripreneurs need access to financial lending organizations such local cooperative banks or health insurance organizations called mutual for social services and social protection. Therefore, an ecosystem approach to agripreneurship development will aim to safeguard the investments made for agripreneurship. While the private sector, especially some food Transnational Companies (TNCs), have been supporting local agripreneurs, there is a limit to what external sources can do such as private companies and the local governments must be involved in co-creating a business ecosystem friendly and supportive for agripreneurship (Carr, Roulin, 2016).

Meso level inputs that enable agripreneurship are for instance farmers associations, collective irrigation workshops and shared food stocks facilities that focus on the need of an adequate professional environment for agripreneurship. With the aid of e-commerce, the current agro-business ecosystem could be broadened to encourage small scale startups and existing food chains that could extend beyond national borders.

a. **Voluntary Sustainability Standards**

An avenue for entrepreneurial activity is to promote and implement the voluntary sustainability standards models. Voluntary Sustainability Standards are standards applied to a product through production, packaging, and transportation that are designed to ensure the product aligns with social, economic, and environmental goals.

Voluntary Sustainability Standards (VSS) include both private and national standards that require products to meet specific economic, social and environmental sustainability metrics. The requirements can refer to product quality or attributes, but also to production and processing methods, as well as transportation. VSS are mostly designed and marketed by non-governmental organizations (NGOs) or private firms and they are adopted by actors' positing up- and down-stream of the value chain, from farmers to retailers. Certifications and labels are used to signal the successful implementation of VSS. (UNCTAD). (Saner & Guilherme, 2006)

However, distinctions should be made concerning the applicability of VSSs between subsistence farmers and agripreneurs. Food produced by subsistence farmers in general does not go to larger markets and hence VSS are not generating benefits for this group except where subsistence farmers are part of a producer community or cooperative where food produced could be sold into a value chain going beyond the local vicinity of the smallholder and subsistence farmer.

A respondent wrote about the importance of policy interventions that help smallholder farmers adapt to consumer preferences through global values chains. They pointed to the VSSs as examples

[3] Paragraph contributed by Peer Wobst and Anna Befurs, FAO.

of a market-based instrument to help the adaption process of new ways of doing farming and achieve the sustainable development goals. In doing so, the agripreneurs may also harness the opportunities generated by the new consumer demands and market opportunities.

One such Voluntary Sustainability Standard is Fair Trade. There is additional income that could be generated through the fair-trade premiums, which could then be invested into community infrastructure (Elder, Wilkings, Larrea, Elamin, Fernandez de Cordoba, 2021). In addition, farmers could gain access to Fairtrade small-scale producer organizations (Elder, Wilkings, Larrea, Elamin, Fernandez de Cordoba, 2021). These organizations could be useful in facilitating the exchange of knowledge and providing advice in overcoming adoption challenge. IISD's Standards and Poverty Reduction Report (2021) states that,

> "Voluntary Sustainability Standards can help farmers improve access to resources— such as better prices for certified crops, increased crop income, forest conservation, soil conservation and watershed protection, social capital via producer organization, and links to supporting actors, including extension services, financial service providers, or buyers to secure sales". (P. vii) [4]

This demonstrates the importance of creating policy interventions and entrepreneurial initiatives that broaden the scope of agripreneurial undertaking and portfolio and correct the issue of access to new knowledge, information of new product developments and market trends.

This study recommends that the institutions which support smallholder farmers should seek out opportunities to leverage the voluntary sustainability standards to generate additional income and gain access to global markets. However, for most application of VSS, access to digital tools and digital connectivity is required which is not always available in rural areas especially not in poverty stricken rural regions. Creating ITC connectivity and digital literacy (e.g. also knowing how to avoid being cheated or falling fray to criminal schemes) would be an important prerequisite for successful application of VSS and stimulating new professional services with higher added value by the smallholder farmer.

b. Extension Services

A respondent pointed to the need for more effective public institutions in rural services. Another addressed how extension services can assist in providing information, like ICT innovations or input knowledge. Extension services can also help the conservation efforts. For example, an agronomist highlighted the use of extension services for better management of land and water resources. One of the FAO reviewers pointed out that contract farming is another means of providing farmers with extension services and that FAO has a lot of literature on contract farming.

Government institutions need to strengthen their extension services to create an enabling business environment for agripreneurs (FAO, 2019). "An agricultural extension service offers technical advice on agriculture to farmers, and also supplies them with the necessary inputs and services to support their agricultural production. It provides information to farmers and passes to the farmers new ideas developed by agricultural research stations" (FAO, 1985) and a guide to extension training has been written by Oakley & Garforth, Hence, policies that help reduce production costs and others that would improve on the quantity/quality of products would be very useful for the success of agripreneurship. Extension services are the key vehicle in upgrading and productivity improvement

[4] Stands and Poverty Reduction- IISD Sara Elder, Ann Wilkings, Christina Larrea, Niematallah Elamin, Santiago Dernandez

de Cordoba. Dec 2021

Of the farming activities, in addition to the introduction of new seeds, disease prevention or reduction of soil degradation measures.

It is imperative for the success of agripreneurship that governments and independent organizations invest in rural extension services. Extension services can promote education and employment amongst rural youth and woman farmers for more knowledge-based jobs and support the needed green transformation of the farm practices.

c. Decent Work Conditions and Child Labour

Though it has been mentioned several times by experts in this study (see the annex 1), the decent work aspect in agripreneurship has not been sufficiently reflected in the discussion nor in the recommendation made. To strengthen the decent work aspect in agripreneurship and job quality in rural areas need to be included and stressed as stated by one of the experts from the Round II:

> "Agriculture is one of the most hazardous sectors in terms of work- related fatalities, non-fatal accidents and occupational diseases. Workers face risks that include operating heavy machinery and equipment, lifting weights and working with animals on a daily basis. They are often exposed to harsh climate conditions, excessive noise and vibration, chemicals, infectious agents, dust and other organic substances. Yet, due to the remote nature of rural areas, agricultural workers often lack access to the necessary health, information and training services to adequately respond to these health hazards.

Most people in rural areas are informal workers and thus have limited or no access to social protection systems. Decent rural employment and social protection complement and reinforce each other. They mutually address the vulnerabilities that rural workers face along their lives, which often stem from hazardous work conditions and the precarious nature of their jobs. Social protection programmes, such as cash transfer or public works schemes, can provide greater income security and temporary jobs to mitigate income losses during lean harvests or caused by seasonal unemployment. They also can help improve nutrition and access to education and health and enable households to better manage risks and invest in productive activities, both on and off the farm. (FAO, Decent Rural Employment) [5] Policies supporting rural development need to address these fundamental rights of work issues in addition to the challenge of productivity improvement and value creation.

d. <u>Leverage Co-creation and cooperatives</u>

Farmer cooperatives can help mitigate the diversification risks of the smallholder farmers and help ensure that enough food is grown locally to meet local needs. Farmer cooperatives also enable farmers to focus on a couple of cash crops so that they can better target their information gathering and marketing efforts -- although it can also increase risk of crop loss when a specific infestation or blight occurs.

[5] Paragraphe suggested by Peter Wobst and Anna Befus, FAO

Another form of shared and collective farming and task sharing could be done through an agricultural cooperative. For instance, composting could be done by some farmers who specialize in this to reach upscaling and free other farmers of an agro-cooperative to spend their time on more profitable use of their own lands and generate income that could benefit other agro-cooperative members.

There is great potential to increase farmers' bargaining power through the creation of food producer cooperatives (FAO, 2016) and diverse partnerships and solidarity among farmers. Cooperatives could help provide the leverage necessary to compete against the industrial agriculture industry. The cooperatives could be designed around any number of the stages of production, from working together to purchase land or just the final stage of processing.

Cooperatives provide a flexible option for farmers to share their production costs. The farmers can decide if they want to create formal cooperatives or develop other forms of cooperation such as co-purchasing production equipment. In addition to easing the cost burden, creating cooperatives can help create a sense of community amongst smallholder farmers and ease the burden of isolation.

Regional and small local organizations like smallholder groups, agricultural cooperatives, or consumer protection associations are other important factors that could help farmers leverage their position in the global food chain and reduce their risks.

A respondent pointed to cooperatives as a mechanism to advance the sustainability agenda. An agronomist wrote that supporting the creation of and participation of farmers in producer organizations or cooperatives could increase their market power when interacting with international markets. Community centers provide additional space for the distribution of information and knowledge amongst farmers and stakeholder groups.

- **<u>Inputs needed at the Macro Level to Enhance the National Regulatory Environment</u>**

When designing agripreneurship policies at the national level, it is important to consider how they will impact the most marginalized groups. A respondent addressed the need for grassroots needs assessments to find out about the specific local issues. Another respondent said that a current barrier to agripreneurship is the exclusion of vulnerable groups such as migrants or minorities from markets and innovations. Another respondent wrote that trade barriers, if improperly designed, can inhibit rural development and distort market signals. Trade barriers could for instance be quantitative production limits imposed by government authorities to ensure price stability.

To create an easy business environment for agripreneurs to flourish, larger agricultural sector companies could support agripreneurs by upgrading the value chain by and providing access to quality raw materials and new markets at affordable price in addition to paying a fair premium for their procured basic raw materials. Such a transformation cannot happen at scale without government regulation. The Nestlé report noted the importance of collaboration amongst multiple

relevant actors required to create an agripreneurship enabling environment, highlighting the need for the national governments to create an enabling macroeconomic environment (Carr, Roulin, 2016).

Going beyond the agriculture sector in promoting agripreneurship, national policy coordination with the financial sector is essential. Novel financing models operating at the grassroots level, including frugal innovation, need to be considered. For instance, converting physical currency into digital currency (and vice versa) which is stored on the customer's mobile phone in a secure manner. The customer can use this digital currency for various types of payments and even for remittances to family and friends in a self-authenticated manner (Rana Kapoor, 2010).

a. Blended Finance Models

To support agripreneurship, there is a need to change the finance options offered to smallholder farmers. A respondent noted the need for "flexible, low cost" access to finance. Another respondent identified lack of finance, specifically "patient capital on concessionary terms" as a barrier for agripreneurship. Another noted that the lack of finance for rural investments in "physical and market infrastructure [impedes] adequate food value chain integration." It is necessary to rethink the finance models available for farmers in order for agripreneurs to be successful.

Traditional finance models do not work for smallholder farmers because they often lack access to banks and credit. It is important to develop finance models specifically considering the credit history and applications of smallholder farmers, so they have access to the necessary financial resources to pursue agripreneurship. Preferential investment and loan programs that favor farmers who adopt sustainable cultivation practices and are tailored to smallholders are needed (Saner, 2010). For example, flexible loan requirements or capacity building activities (Saner, 2010).

b. Village Savings and Loans Association

For majority of rural crop farmers, access to formal credit is an unattainable dream due to systemic and socioeconomic barriers such as prohibitive lending rates, loan application bureaucracies, and poor risk attitudes. Recent studies, including Anang et al. (2016), Abdulai et al. (2017), Nkegbe (2017), Wongnaa and Awunyo-Vitor (2019) and Martey et al. (2019b) find limited access to credit among farmers. Specifically, the studies showed consistently low access to credit, with Abdulai et al. (2017) revealing that only 7.5% of their 360 sampled maize farmers in Ghana had access to formal credit.

Credit-constrained rural crop farmers are often compelled to rely on social networks, moneylenders, and other available semiformal lending sources to raise capital for farm investment. These credits tend to be short term and often insufficient to meet the investment needs of the agripreneurs. Village Savings and Loan Associations (VSLAs) have emerged in recent times through NGO-backed projects. Based on collective savings, VSLAs serve as microfinancing in the rural area as well as providing savings and insurance services.

VSLAs meet the triad goal of financial services that poor and vulnerable people need for improved livelihood outcomes. Karlan et al. (2017) found that participation in VSLAs improved business outcomes and empowered women – the primary targets of VSLAs – in Ghana, Malawi, and Uganda. and mitigate credit supply risks by linking farmers directly to inputs and reducing the need for cash loans.

- **Inputs needed for meta level to strengthen the agro global governance**

    a. **A justice and right-based international trade law**

International trade agreements, i.e., WTO, FTAs, and RTAs, including agriculture should be centered on justice and rights-based trade laws. It is important to consider human rights when developing new trade laws, as well as placing much deserved value on the global eco-service smallholder farmers provide. Traditional trade lawyers might not be in agreement with such a rights-based approach but the 2030 Agenda includes multiple references to human rights and trade focusing on contributing to the global sustainability goals can no longer ignore the Rights aspect of trade and economics in the context of the 2030 Agenda including both Human Rights Agreement (Protecting Individual Rights as well as Economic, Social and Cultural Rights)

This can be achieved through prioritizing existing human rights declarations when revising international agriculture trade law. For example, see the Article 25 of the Universal Declaration of Human Rights of 1948 on the right to food. The UN Committee on Economic Social and Cultural Rights' Article 12 provides four guidelines for states on how to ensure the right to food (OHCHR, 1999). Governments can also support the prioritization of human rights through laws that "facilitate collective action and market linkages for smallholder farmers (FAO, 2019)." In addition, governments can develop strong health and safety policies (FAO, 2019).

As suggested by one of the FAO reviewers, Brazil has the largest structured demand programmes in the world based on two Brazilian policies namely the Food Acquisition Programme (PAA) and the National School Feeding Programme (PNAE). The two policies create a structured demand for small farmers producing food crops (Siobhan & Swensson, 2017). The PAA purchases food for stockpiling, price regulation and food assistance for vulnerable groups, while the PNAE invests exclusively in school meals, as a means to promote food security, keep children enrolled and performing in school, and to strengthen smallholder farmers' agriculture. The PAA was designed by the Brazilian government to support smallholder farmers in one of the most difficult aspects of the productive process: gaining market access for the produce they grow. The programme allows farmers to sell their produce to local public institutions such as hospitals, community canteens, food banks, orphanages and charities, without the need for a public bidding process (IPC-IG, 2013).

Trade in agricultural products has been a controversial topic of international relations and will remain an important factor impacting food security across all regions of the world even though the evidence of the impacts of trade on food security is limited and impacts are mixed (Krivonos, Morrison & Canigiani, 2015). The short- and long-term focus of policymaking efforts should be directed towards increasing transparency and coordination of global agricultural markets and of

respective national agricultural policies. (Saner et al. 2012). This is particularly relevant in light of the AfCFTA (African Continental Free Trade Agreement) which could provide opportunities for African farmers to diversify their agricultural exports by developing export to their African neighbors where they will lower tariff boundaries and Non-Tariff Measures.

b) Discussion and Recommendations based on the results of Round 2

The research team decided to invite new respondents rather that ask the respondents of the Round 1 to revisit the summary of their own and the others respondents' statements.

The reasons for this methodological approach was the thinking that it could be useful to invite additional experts who did not participate in Round 1 and to invite them to read the statements of the Round 1 participants and then to add their own views. Based on their relative distance to the Round 1 results, we thought that the round 2 participants would add a form of validation of the Round 1 results.

We found that the results of Round 2 indeed generated some validation of the Round 1 experts' views and at the same time the Round 2 experts added new insights which were not mentioned by the experts of Round 1. Combining the results of Round 1 and Round 2 through simple frequency scores gives an interesting comparative sets of priorities of both groups.

What follows are the responses of the Round 2 experts grouped according to the four Levels of Analysis used for this study. The detailed answers are available in Annex 3. What follows is Table 3

Table 3: Results of experts of Round 2 grouped by the 4 levels of Analysis.

Level of Analysis	***Findings Round 2*** ***Categories of Round 1 are in black new*** ***Categories of Round 2 are in red***	***Frequencies of Round 2 statements by number of participants***
MICRO		
1. Inputs needed at the Micro Level to enable smallholder farmers access so to nurture the right mindset and agripreneurship acumen	a) Access to information and technology and knowledge platforms	3
	b) Access to markets and multifunctional farming g	2
	c) Access to economic opportunities by women and youth in rural areas	1
	d) Access to quality Education and Training	1
	e) Access to credit facilities	1
	f) Knowledge about modern agriculture methods and markets	2
	g) Business plans and financial projections	4
		Total 14
MESO		
	a. Voluntary Sustainability Standards	

• Inputs needed at the Meso Level to promote Ecosystems for Agripreneurship	b. Extension Services	
	c. Leverage Co-creation and cooperatives with food processing and marketing and strong backward and forward linkages	5
	d. Value chains and savings groups	1
	e. Agro-manufacturing	1
	f. Local leadership training	1
	g. Engage UN Agenciers ILO+UNDP	1
	h. Insurance coverage	1
	i. Strengthen rural to urban linkages	3
	l. limited investment in agro sector	1
	m. Linkages between rural agriculture and the urban non-farm economy	1
	n. Private sector involvement	1
	o. CSO involvement	1
		Total 17
MACRO		
• Inputs needed at the Macro Level to Enhance the National Regulatory Environment	a. Blended Finance Models	2
	b. Regulatory measures to prevent exploitation of poor farmers	1
	c. Infrastructure development	2
	d. Weak land tenure system	1
	e. Protect women and minorities	1
		Total 7
META		
• Inputs needed for meta level to strengthen the agri global governance	1. A justice and right-based international trade law	1
	2. AfCTA cross-border trade generating agripreneurship	1
	3. Strengthen role of UNDP and ILO	1
	4. Encourage South-South cooperation	1
	5. Harmonize Non-Tariff Measures within AfCTA	2
	6. Support cross-border value chains	1
	7. Bilateral partnership	1
	8. Trilateral cooperation FAO + agro institutes + developing countries	1
	9. Training on SPS	1
		Total 10

(Legend: Themes mentioned by Round 2 participants in red)

Comparing responses given by the experts listed in Table 2 (Round 1) and Table 3 (Round 2), the following combined results emerge (see table 4 below). However, one should bear in mind that Round 1 consisted of 13 experts while Round 2 had only 4 experts, the total can be misleading. It is not an equally distribution of frequencies by group. Instead, it is a simple total number of frequencies of statements made by the 13+4= 17 participants.

Themes (by order of frequency)	**Number of References by – Round 1 Respondents (unique count)**	**No of statements by Reps of Round 2 experts MICRO**	**No of statements by Reps of Round 2 experts MESO**	**No of statements by Reps of Round 2 experts MACRO**	**No of statements by Reps of Round 2 experts META**	**Total statements both Rounds**
1. Access to credit/Finance	10	-	-	2	-	**12**
2. Youth Development/ Engagement	8	-	-	-	-	8
3. Access to Education	8	-	-	-	-	8
4. Access to Markets	7	**2**	-	-	-	**9**
5. Information Exchange online/ Technical Assistance	7	**3**	-	-	-	**10**
6. Climate Resilience/ Sustainability/ Green economy	6	-	-	-	-	6
7. Access to Digital Infrastructure	4	**3**	-	-	-	**7**

Table 4: Most often mentioned statements: combined frequencies of Round 1 & 2 participants (Legend: numbers in red pertain to Round 2 participants)

What is however striking is the combined high frequency of the top three statements of the following categories: 1. Access to credit and finance (12); Information exchange online (10); Access to Markets (9). When combining statements 5 and 10, it becomes apparent that both groups perceive that digitalization as necessary to help small farmers move up to the level of being an agripreneur. Agripreneurs are the ones who engage with the market opportunities in a systematic manner.

There are also remarkable differences between both groups. Round 2 experts addressed thematic topics which the 13 participants of Round 1 did not mention. These statements captured the importance of business and management capacities and forms of organizing productive forces. They are: a) importance of Business Plans with financial projections (Micro, 4); b) creation of cooperatives with backward and forward linkages (Meso, 5); c) strengthening of rural to urban linkages (Meso, 3); and d) support of cross-border value chains (Meta, 2). These statements represented the need for capacities to successfully manage the transition to the next level of agripreneurship development namely from agripreneurs to that of agro-business.

In addition, other statements were added by the Round 2 participants which appear useful for the auxiliary support and development of agripreneurs such as improving agro-manufacturing, local leadership training, private sector involvement, infrastructure development, strengthening land tenure system and various measures regarding trade and obstacles to trade. While remaining sectoral and meso level in their scope, policy coordination and vertical coherence with the macro level policies are already surfaced.

It was also interesting to see that the Round 2 participants did not mention “access to education”, “youth development” nor “resilience and sustainability orientation”. It might be interpreted that the Round 2 participants already saw the statements made by the Group 1 participants and considered repeating these topics as redundant. They therefore chose to push the exploration forward by bring out other underlining factors not mentioned by Round 1 participants to complement the existing ones.

Conclusions

The objective of this study was to provide insights on what are the needs of smallholder farmers who want to move towards being an Agripreneur. It was intended to identify feasible pathways to help agripreneurs be successful in their undertaking. Smallholder farmers are defined as owners of mostly family owned agricultural enterprises.

This report focuses primarily on the broader enabling environment which supports the success of subsistence agripreneurs (first level of entrepreneurial development) and provides opportunities to transform their micro business into small business venture which could generate greater revenue and jobs.

The following stakeholder groups participated in this study WTO Member States, International Organizations, academia/ researchers, Agro-businesses, and CSO/NGO organizations. The final results consist of responses from two WTO member states, four International Organizations (UN/IO), two academia/researchers, three Agronomists, and two International Advocacy Organizations (IAO).

The results obtained through Round 1 and 2 showed a great degree of congruence amongst the respondents concerning the general underlying causes that block agripreneurship from flourishing. Divergence of opinion also exists on specific areas. The respective responses to the six qualitative questions in detail are listed in the Annex 1.

As a whole, the group perceived that agripreneurship could be a corner stone for achieving sustainable livelihoods and for promoting rural development if the right conditions at different system levels exist. However, getting access to resources and opportunities has been clearly identified as a crucial success factor of agripreneurship. Access to capabilities and opportunities for the farming communities, especially women and youth, will enable sustained agripreneurship and result in reducing persistent hunger, malnutrition, and other forms of precariousness confronting

the farming communities especially smallholder farmers around the world. Providing access includes updating financial models, building extension services, prioritizing sustainable production methods, and eliminating the connectivity or digital divide.

Learning to master inevitable operational and market challenges are necessary conditions for the smallholder farmers to engage in entrepreneurial activities. To engage in continued learning that generates growth of individual competencies that enables the smallholder farmer to move to the next level of farming by adding to traditional agricultural products such as cash crops and off-farm and non-farm income generation activities. To reach a higher level of agricultural development, this transformation is needed. This is the potential that agripreneurship development holds.

Not having "access" was identified as a key hindrance holding back agripreneurial initiatives and preventing smallholder farmers from succeeding and scaling up. Lacking access also means that the risk of falling back to substance farming remains high. The following highest-ranking factors affecting successful agripreneurship reported by the respondents are:

1. Access to credit and finance (12);
2. Access to information exchange online (10), i.e., internet or mobile connectivity;
3. Access to markets (9).

When combining the factors on Table 4 of access to information and exchanges online (Theme 4) with the underlying enabler to digital infrastructure/social networks (Theme 7) (Table 4), a slight shift of ranking takes place. Combined, both themes, amount to a frequency count of 17. This finding suggests that the possibility of an integrated strategy to invest in the digital infrastructure development would be very beneficial for the agripreneur and his/her community. A combined policy programme of infrastructure development, user literacy, and network creation including content curating and small credits or grands accessible via online portal could be a successful strategy for developing agripreneurship.

More in-depth research into the specifics of the recommendations gathered would be useful to develop the most effective policy mix and intervention strategies that support smallholder agripreneurship and thereby guarantee the most beneficial support for farmers and their environment and ecosystem.

The key messages to come out of this study relate to competence upgrading and access to information, technology, physical and social infrastructures and finance. These findings mirror to a large extent the policy recommendations of the FAO Agripreneurship in Africa Report. FAO's recommendations included action items such as "target the technical gap, especially among (rural) youth," "design finance with agripreneurs in mind," and "invest in improved infrastructure."

However, what is new of this current study is putting the analytical elements into a meaningful 4-level framework and identifying remedial solutions for improving the agripreneurial potential of small holder farmers based on distinct policy solutions that are linked to specific analytical levels. This multilevel analysis and remedial actions would facilitate discussions according to identified

policy gaps resulting in more adequate and tailored policy solutions. It would also help to avoid overgeneralization of policy interventions which often blur responsibility lines and weaken the resolve to propose and agree on locally specific and integrated policy packages.

To conclude, a 4 level policy matrix is presented in Table 5 below. It provides a detailed overview by classifying the emerging themes of the findings in a hierarchy of aggregates and respective interventions.

Table 5: Classification of emerging themes of the findings in a hierarchy of aggregates and respective policy interventions by meta, macro, meso and micro policy levels

Level	Discussion topics	Pillars of intervention
Meso	Justice and right based international law (10)	Leveraging the potential of agripreneurs to benefit from globalization, trade and digitalization by creating an enabling environment for rural areas to identify and invest in their areas of competitive advantage such as tradable entrepreneurial activities adding value to rural assets (could be expanded with examples).
Meso	Agripreneurship and related ecosystem development (3)	Organizing rural policies and governance at the relevant geographic that match with functional relationships (local labor, markets, food chains, environmental services and amenities) based on current and future needs; and improving government mechanisms to realize rural policy objectives; and encouraging the efficient and effective provision of public services and infrastructure.
Meso/Micro		Diversifying agriculture into high-value agricultural (and other rural ecosystem) products and services to support agri-business in fields such as manufacturing, food processing, and retailing.
Meso/Micro		Securing agriculture land is an important priority for the development of agripreneurship. Agripreneurship development strategies should not only be based of land security, but also on adequate transfer, lease, and mortgage of land use rights with strong law enforcement rules.

Meso/Micro		Supporting the establishment of platforms for multiple stakeholders' interactions and capacity development in areas such as policy formulation, institutional coordination; political economy management, negotiation, stakeholders' participation, conflict management and resolution, etc.
Micro		Encouraging community-led development and strengthening the role of agripreneurs in developing bottom-up initiatives and integrate them in processes of governance and planning at regional and local levels.
Meso/Micro		Investing and training in digital connectivity to facilitate the use of ICT such as cloud computing, artificial intelligence, the Internet of Things and block chain technologies by extension agents, agripreneurs and farmers.
Meso	Market diversification (6)	Supporting inter-dependencies and cooperation between rural and urban areas by carrying out joint-sector strategies and fostering win-win rural-urban partnerships to promote an integrated development approach beneficiary to the development of agripreneurship.
		Enabling legislative and regulatory frameworks and institutions to allow the creation and reinforcement of rural-urban partnerships, including related agripreneurships.
		Developing and implementing territorial and spatial planning tools emphasizing the rural-urban continuum for the promotion of more equitable, balanced and integrated rural development.
		Promoting infrastructure that is strategically linked to markets and services, including transport infrastructure, telecommunication and energy improving rural and urban connectivity.

Meso/Micro		Building platforms for the coordinated development of agripreneurs' industries. First would be to promote a cross-border allocation of urban and rural factors and the organic integration of agripreneurs' enterprises. Second is to create a number of typical agripreneurs' projects of urban-rural integration to create a demonstration-driven effect.
Macro	Extension services (7)	Aligning rural-urban sector strategies to deliver efficient public services through bringing into line key sector policies (e.g. agriculture and forestry extension,
		transportation, health, etc.). Improving the efficiency of agripreneurs is requiring improving urban-rural linkages, notably rural-urban connectivity.
Meso		Improving, the efficiency of integrated urban-rural extension services for the effective promotion of cooperative entrepreneurship through the provision of vocational/skill training, provision of storage/processing facilities, sanitation activities, procurement of agricultural inputs and information on credit and other financing sources,
Meso		Incentivizing innovative practices by promoting digitalization complemented by training for public sector personnel (extension), agripreneurs and small farmers to use e-services.
Meso	Leverage co-creation (8)	Promoting public-private investment in agriculture and rural development (including non-farm sectors) by way of entrepreneurship nurturing agriculture and urban areas with a view of increasing the supply of safe agricultural products and services provided by agricultural landscapes.
Meso/Micro		Strengthening relations between producers and consumers and promoting inclusiveness of farmers' entrepreneurs and smallholder producers across supply chains.
Macro	Blended finance models (9)	Enhancing the role of and defining related regulation standards for public-private partnerships in financing agriculture value chains, the upgrade of market infrastructure and the development of business-related services.

Meso/Micro		Improving the social impacts of and farmers' entrepreneurs' access to existing credit and loan institutions, micro-finance institutions, trade finance mechanisms and other formal and informal financial inclusion services for farmers' entrepreneurs to develop income generating activities at regional and local level.

Meso/Micro		Developing innovative financing mechanisms for inclusive human capital (e.g., capacity building and training for existing and innovative micro-finance professionals, agripreneurs and farmers, etc.);
Meso/Micro		Improving R&D for the development of innovative financing mechanisms to support rural entrepreneurship (e.g., ICT motivated mobile/internet banking for rural development, crowdfunding, blended finance transactions, thematic bonds – green bonds, international funds for R&D, etc.).
Meso/Micro	Gender and youth (4)	Providing land titles to ensure property rights to rural stakeholders (with a particular attention to women, youths and minorities) as a critical component to the development of agripreneurship.
Meso/Micro		Developing vocational training programs according to the specific needs of women, youths and minorities.as to make training content better meeting their entrepreneurial needs, and, as a result, better achieve the expected goals of increasing their knowledge and income.
Meso/Micro	Voluntary sustainable standards (5)	Certification, including voluntary sustainable standards, is an effective measure to improve the competitiveness of agripreneurs. Certification is also an important symbol of for the development of "green" agricultural products. The role of governments, however with consideration to the role, participation and support of the private sector, should be to (i) reward green agripreneurs; (ii) provide training for the production of certified products; and (iii) enhance consumer markets for certified products or products meeting voluntary sustainable standards.

		Enhancing consumer for certified products requires establishing visual platform relying on Internet, Internet of Things, and cloud computing, modern video technology. Relying on ITC tools would also enable consumers to understand, by use of smart phones, the growing environment of certified agricultural products, as well as the use of fertilizers, pesticides, feed and other uses, which enter the whole cultivation process.

(Source: Claude Heimo, associate member of CSEND, 2022)

Declaration on Possible Competing Interests

This study was solely self-financed by CSEND. The study was not mandated by FAO nor was it a paid consulting or research project. The study and its findings are part of CSEND's contribution to knowledge creation for development policies

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Annex 1

QUESTION 1: IN YOUR OPINION, WHAT AGRICULTURAL POLICY INTERVENTIONS ARE LIKELY TO SUPPORT SUSTAINED AGRIPRENEURSHIP IN THE RURAL AREAS AND PROVIDE ECONOMIC OPPORTUNITIES FOR THE YOUNGER GENERATIONS IN DEVELOPING COUNTRIES?

UN/IO

Trade policy plays a key role in promoting entrepreneurship and levelling the international playing field for farmers, and the agri-food industry. The WTO rulebook, and in particular its Agreement on Agriculture, tackles tariffs, domestic support (subsidies), export restrictions, and export competition measures, to ensure transparent, predictable, equitable and nondiscriminatory access to markets. It has allowed for the rise of Global Agricultural Value Chains that are key to global food and nutrition security.
Adaptation to consumer preferences through global value chains (GVCs). In particular the utilization of market-based instruments like Voluntary Sustainability Standards to integrate production into GVCs. Non-tariff measure (NTM), like SPS and TBT, should also be looked at in order to support agripreneurship. Given that NTMs are policy measures other than tariffs that can potentially have an economic effect on international trade, hence it has implications on the economic opportunities of rural areas which are dependent of commodities exports.
Official linkages to trade and commerce departments and local offices. In countries such as Uganda and Zambia the EIF has been working to better link commercial services to entities in rural areas, the majority of which are agriculture focused. This helps bridge both access to services and linking better informing supply of market demands (both nationally and internationally).
• Linking education courses to the needs of the agrifood private sector and ensuring high-calibre instruction in VETs, Universities and incubators. • Flexible, low cost access to finance. • A clear and easy business enabling environment. • Easy access to low cost and environmentally sustainable packaging. • Easy access to locally-appropriate green technologies (that can be fixed locally). • Rural services or digital services in the absence of physical presence in; marketing; product development; food safety; finance;

Government

The main driver is education in all levels, including university level. The need to leave its original land to do university studies on urban areas make it harder to young people to imagine their life getting back to rural area. In this vein, it is necessary to offer education opportunities in rural areas.
The rural youth has just a few life options. They need to see that staying in rural areas is a valuable option. Therefore, young people need credit, with both official and private origin, technology development – including connectivity- and transfer, capacity-building, technical assistance, market access and land access. Non-trade and production-distorting domestic support measures, such as research, training services and infrastructure, are also advisable.
Incentivizing the production of sustainable methods of production, setting up a label system that recognizes quality of the products and can offer higher revenues, aligning national standards of production to international ones to offer increased opportunities for exports, organizing a competition with defined criteria to select specific projects to be supported

Research/Academics

Tax incentives
In my experience there are three key policy interventions and action areas that need to work in tandem to sustain agripreneurship: a. The first requirement is marketing and economic intelligence to generate a sustainable demand-focused. b. The second task is to build the productive capacity of entrepreneurs through technical assistance, incubators/accelerators and business coaching/shepherding. The third is trade and investment facilitation to ensure the coordination between trade financing and market integration programmes.

International Advocacy Org.

India with more than 86% fanner being small and marginal, it becomes important that focus should be laid on aggregation. Young generation can be motivated and deployed to work closely with these groups for both on farm and non-farm employment opportunities. This young group of people can bring new ideas and can make agriculture profitable. The policy interventions must be such to attract the youth by providing adequate facilities in rural areas like proper channels for credit, market linkages and infra development attracting them towards agripreneurship.
N/A

Agronomist

- Support informal sector actors to transition into the formal sector through tailored regulation and improved access to credits - Investment in extension services and agriculture vocational programs, especially geared toward women and rural youth - Support for the creation of and participation in farmers alliances and similar organizations - Expansion of credit access to small-scale farmers and SME's
- Investing in infrastructure, especially digital services, to expand access to markets and encourage e-commerce These are examples of possible interventions and will need to be tailored to the context. In most cases, no single measure will suffice, but will need to be bundled to address key constraints to food supply chain integration and leverage decent job creation and dynamize entrepreneurship upstream and downstream.
For the time being, the development of agripreneurship does not get sufficient attention in rural areas of many developing countries (and even in countries such as China), for two main groups of reasons. (i) **Poor modern infrastructural facilities** (transportation, communication, connectivity, power, and marketing network), **low rural people's entrepreneurial culture** (remote rural location), **outmigration of young rural people**, **poor business diversity, inadequate access to inputs, poor credit facilities and lack of collateral**; and (ii) A**bsence of integrated government policies**, focusing predominantly on sector activities (livestock, forestry, fisheries, ecotourism, etc**.), low efficiency of extension services, absence of adequate urban-rural linkages and inadequate development of public-private (or community related) organizations** to support the process of agripreneurship. In view of the above constraints, **governments (as well as international financing institutions) should give more attention to entrepreneurial capacity building** (education and training notably towards both rural youth and sector extension agents), **developing rural Incubation or rural business centers** (acting as agripreneur business mentors for improving the efficiency of urban-rural market linkages and related value chains) and **facilitating access to credit, subsidies or incentives** to support processes of agripreneurship development.
support to communication networks that ease direct access to and exchange of information (e.g. current commodity prices, buyer contacts, supplier an services contacts) by farmers, namely online via internet

QUESTION 2: FROM YOUR EXPERIENCE, WHAT ARE THE MAJOR BARRIERS INHIBIT RURAL DEVELOPMENT AND AGRICULTURAL PRODUCTIVITY IN DEVELOPING COUNTRIES?

UN/IO

Trade barriers such as tariffs, subsidies and export competition measures, if improperly designed and used can inhibit rural development, increasing the cost of inputs, and generally distorting the market signals on which efficient agricultural production, distribution and trade depend.
Access to technology, access to finance, access to fertilizers, and access to markets. The key is infrastructure development: energy sources, roads and interconnectivity.
Access to technology, training, and effective linkages to market drivers.
- Fragmented policies and interventions;
- Lack of alignment in vision and approach between public sector institutions and development partners; - Lack of alignment between on farm activities and investments and off-farm downstream objectives - Outdated Vocation and tertiary curricular on agrifood sector related topics.

Government

The main point is to see positive perspectives on country life. If cities offer more life options, especially young people will have more reasons to leave than to stay. The lack of access to land, to credit, channels to sell production and lack of connectivity are the major barriers.
The rural exodus of young people who aspire to other more lucrative professional prospects, absence of government incentives to stay in the agricultural production, changing climatic conditions and lack of technology to deal with them as well as lack of knowledge about sustainable production methods and access to finance

Research/Academics

Mismatch between population and land available
a. Lack of finance, particularly patient capital on concessionary terms. b. The shortage of training for aspiring and early stage agripreneurs in a value-chain upgrading strategy.

International Advocacy Org.

Some of the key barriers inhibiting the rural development and agricultural productivity in developing countries are as follows- -Following years old agronomic practices -Small and fragmented landholdings -Lack of credit availability for small and marginal markets, 70% of Small and marginal farmers still do not have access to institutional credit. -Purchase of agriculture inputs at retail price and selling produce at wholesale price -Lack of price awareness and importance of value addition practices like grading, sorting and cleaning -Lack or infrastructure at village level -Low trust on government schemes that are there for benefits of farmers -Limited access to markets -Migration of educated and skilled youth to urban areas -Inadequate infrastructural facilities -Costly physical logistics -Lack of appreciation to adopt entrepreneurial culture among people
- Visibility between agri-SMEs and investors - Lack of investable/mature agri SMEs that understand financing and how to develop a proposal or investment deal - High risks associated with investment in fragile food systems/smaller SMEs, as well as lower return
- Imbalanced gender roles; women's lack of access to finance, education, control over estate - Land tenure issues

Agronomist

- Chronic underinvestment in improved technologies that can be adopted by smallholders in developing countries, perpetuating low levels of productivity - Inadequate incentives and finance for rural investments in physical and market infrastructure impeding adequate food value chain integration, market access for smallholders, and development of off-farm agri-food businesses and services - Lack of public funding for agricultural R&D - Exclusion of vulnerable groups from markets, new technologies, and other innovations - Food loss and waste from poor storage facilities and disconnections between different markets - Regulatory delays in approval for new technologies

Generally speaking, there are many barriers of various strengths depending on local situation, that have long been identified and which were and still are inhibiting rural development and agricultural productivity. They can be classified as **agriculture-related problems** (e.g. unavailability of inputs, poor marketing facilities, small size of land holding, inadequate farmland structure, , etc.), **people-related problems** (e.g. low level of education and inadequate understanding of new technology, traditional way of thinking), **infrastructure-related problems** (e.g. inadequate access to water and sanitation, electricity, transport, educational institutions, connectivity, off-farm employment, storage facilities, etc.), **economic problems** (e.g. high costs and inefficient delivery of inputs, unfavorable economic conditions to adopt high cost technology and develop rural industries, lack of capital and credit availability etc.); and **institutional/administrative problems** (e.g. absence of inter- sector coordination, low rural-urban integration and capacity for integrated spatial planning, insufficient efficiency of sector extension services, low interest for agribusiness development and related value chains, poor storage and marketing facilities, etc.)

Moreover, due to climate change, rural development and agriculture productivity are now facing many new challenges, and that in developed and developing countries. In addition to its essential role in food security, agriculture is nowadays seen as a source of **environmental problems and a contributor to global warming, water scarcity** (70% of freshwater is used for agriculture), **farmland productivity degradation** due to NPS pollution and **natural ecosystems' degradation**.

- bureaucracy in rural services: extension, input distribution services, product sale structures
- state monopolies
- poor infrastructure
- poor access to information and knowledge
- poor access to open market structures

QUESTION 3: IN YOUR OPINION WHAT TYPE OF SERVICES IN AGRICULTURE COULD PROMOTE GREATER INCOME GENERATION THROUGH AGRIPRENEURSHIP OR BUSINESS DEVELOPMENT FOR THE SMALL FARMERS OR YOUNG PEOPLE?

UN/IO

The WTO General Agreement on Trade In Services (GATS) is key promoting better agricultural development worldwide. It regulates scheduled services by WTO Members, many of which have a great incidence on agricultural development, such as retail, transportation, marketing and distribution services. Its proper implementation and expansion to new services is therefore key for greater entrepreneurship and business development. E-commerce is a new and growing area, in which there are ongoing negotiations in the WTO.
Integration to national markets, and support for development of vertical and horizontal integration into Global Value Chains.
More information availability to farmers through new forms of extension services or links (such as through ICT innovations and access to and knowledge of inputs); better linkages to services enabling the transition to more market services (particularly access to finance), as well as to other services to be able to better link into the formal economy (such as government services).
Rural VET, incubators, easy affordable access to finance, rural services in business and marketing services.

Government

There are several services that could be offered to small farmers and young people. Technical assistance is one of the driving forces on increasing productivity and, therefore, income generation. Worldwide, technical assistance has been changing in the last decades to promote not just more productivity on one crop, but diversification on production, with sustainable choices that preserve better the field and generates more income in short and long terms. Regarding technical assistance, it is important to consider the connectivity dilemma. Young generations are born in a world of technology. On the one hand, the latest developments on technology, such as smartphones and larger bandwidths, allow for making remote technical assistance. In addition, a very likely way to simultaneously promote greater income generation

and retain and attract young people to rural areas is to invest in tech-related services, such as the usage and the creation of mobile or computer applications. On the other hand, people on developing country in the most remote areas face difficulties in dealing with technology. So, technical assistance and opportunities should encompass both the in-person technical assistance and connectivity efforts. Besides technical assistance, market access is another service to be provided. Some countries have positive experience on channeling the productions to institutional purchase. Collective
Logistic solutions also play an important role, especially on more distant areas. Public auctions and the creation and promotion of public fairs may also facilitate production selling.
Facilitated access to credit (financial services); education; access to international markets

Research/Academics

Education
a. Business support services and technical assistance in product development (e.g. proof of concept). b. Intellectual property asset management and contractual services

International Advocacy Org.

-Agri-Input Connect -Advisories on best agricultural) practices -Market Connect services -Financial connect to farmers -Generating secondary sources of income with Layer cropping, Apiculture, Mushroom culture, Organic and Natural fanning -Going into value addition of the locally produced products -Access to finance -Access to Post Harvest Management facilities and logistic services -Technical training programmers for specific skill development
- Diversified crop systems with higher-value crops such as fruits and vegetables - Extension to support this diversification as well as access to markets and off takers interested in purchasing new crops from smallholders. - Access to finance so agripreneurs can invest in building their businesses and growing/diversifying incomes streams - Mechanization of certain agricultural processes so that youth and smallholders can focus on more advanced/other stages in the value chain such as primary or secondary processing; seed distribution; training; etc.

Agronomist

- Expansion of extension services to improve the management of land and water resources as well as expand the use of enhanced crop varieties
- De-risk agricultural finance and create mechanisms for improve access to credits for smallholders and agri-food SMEs to encourage investments in climate-resilient production methods on the farm and in off-farm agri-food activities
- Affordable insurance services to help small producers manage risks associated with adopting new practices and technologies as well as negative shocks
- Improved crop storage and transport to reduce food loss and waste

E-commerce and e-procurement that allows farmers to connect better with input providers, traders, processors, and where appropriate with consumers.

Promoting greater income of small farmers and young rural people will first require strengthening rural economy through better urban-rural linkages, which should evolve

Towards more diversified economic activities, beyond agriculture and other natural resource-based sectors. This would require support to the development of new industries such as ecotourism built around ecosystem services, art and culture as well as enhancing manufacturing beyond the usual first stage of processing of agricultural products and natural resources. If those industries can drive additional prosperity to rural people, there is a need for transition from short-term sectoral support towards long-term sector coordinated actions aimed at building favorable conditions for long-standing growth. They include three main actions:

(i) **Promoting private sector investment for the development of green industries through adoption of public-private partnerships**. To encourage private sector investments in rural areas, adopting sustainable agricultural practices, bringing value adding to agricultural products through primary and secondary processing and the development of value chains addressing the urban population needs (and why not export), enhancing the economic value of existing natural ecosystems and rural landscapes, providing incentives for agripreneurship development and adopting better risk management strategies are needed to make investment from private sector more attractive;

(ii) I**mproving the competitiveness of agricultural producers through value chains, certification, labeling and traceability**. If the development of commodity value chains would be an effective measure to improve the competitiveness of rural enterprises, yet efforts should made to not only build strategic alliance between farmers and enterprises, but also to develop, through capacity building and training, rural peoples' capacities to identify, organize, start, operate and take effective control of rural enterprises. Additionally, certification, as a measure of improving agricultural products safety and quality required by today's consumers and export markets, needs strengthening which integrates the responsibility of the government with the participation and support from the private sector; and

B**uilding platforms for the coordinated urban-rural integration of value chains** to maximize urban areas' consumers' benefits as important movers of innovation and integration of rural enterprises into the urban area's context.
– reliable online access to platforms etc. for direct exchange between farmers and service, input, outlet providers – simplicity, transparency and predictability of all govt interventions and policies regarding matters of agricultural production and trade

QUESTION 4: IN AN IDEAL WORLD, WHAT TYPE OF BUSINESS DEVELOPMENT OR ENTREPRENEURIAL INITIATIVES IN THE RURAL AREA MIGHT ACHIEVE AGRICULTURAL SUSTAINABILITY THAT FAO SHOULD INITIATE OR SUPPORT
ESPECIALLY WHERE YOUNGER GENERATION MIGHT CONTRIBUTE AND BENEFIT?

UN/IO

Not an area of WTO expertise.
Entrepreneurial initiatives through cooperatives and associations have proven good result to advance the sustainability agenda.
Initiatives to better connect agriculture and trade/commercial services as well as greater alignment of the related policies and programming.
This is a very loaded question and there is not a straightforward answer nor a silver bullet. Sustainability needs to be consumer led and private sector driven – otherwise any investments in sustainability efforts are lost investments. FAO projects need to get behind what is already working on the ground in partnership with other actors so that efforts are integrated and not piecemeal. Support to downstream institutional gaps, and linkages, are also needed in areas that would deal with sustainability e.g. environmental protection agency or food marketing boards etc. The youth focus also needs to be carefully thought through; for example there have been cases with the grant programmers where support to very viable business models, owned by over 40s, have lost out to younger competitors with less compelling propositions.

Government

i. Exchange programs for young professionals, through which agricultural engineers, veterinaries and other correlated professionals go to the small properties to use they recently acquired skills in the properties. ii. Support start-ups that searches solutions for small and family enterprises. iii. Technical assistance provided both remotely and in-person.
Initiatives aiming at promoting sustainable methods of production and increased value-added in the country

Research/Academics

Tax incentives
Youth entrepreneurship programmers are critical to facilitate value-addition and industrial upgrading which are needed to boost youth employment and interest by the youth.

International Advocacy Org.

-Need assessment at grass root level and finding issues at a local level

-Training young people to address those issues and challenges

-Providing adequate resource to address those challenges

-Providing the concept and showcasing the impact and involve more people in the movement

-Training people on importance of aggregation, related agripreneurship prospects and how to take advantage of on farm and non-farm income generation activities in backward and forward linkages

- Training on types of financing and capacity building as to how to access it
- Connections with investors; business coaches and trainers to help further develop new ideas and technologies

Agronomist

- Teaching and promoting environmentally sustainable agricultural practices such as more efficient irrigation, reduced tillage, and optimal crop spacing
- The adoption and effective use of e-commerce to connect farmers and agrion SMEs with buyers

Achieving agricultural sustainability through entrepreneurial initiatives would first require providing advice and expert support to governments and international financing institutions, including the release at national and local level of updated information and systems from innovation in research and development that would improve knowledge and innovation transfer and investments supporting the local adoption of high-level agricultural technology to improve production efficiencies and the production of safe food, including decreasing farmland NPS pollution, improving water use efficiency (irrigation) and environmental protection, rehabilitation and conservation. Worth to note is the fact that the rapid adoption of ITC technologies, notably mobile smart phone and computer technology in rural areas (of developed and developing countries as well) is providing new opportunities to accelerate the spread of innovative green/ecological farming technology as well as improving related farmers' knowledge and awareness. Additionally, additional support should be addressed to the private agri-business sector as for it to undertake more oriented-market research and development. In this context, a particular attention should be given to the following four integrated actions:

(i) **Improving the efficiency of rural services**, Improving rural services would be key for the promotion of agripreneurship, as those services are to: (i) add value to the various functions of agriculture and agriculture landscapes to be expanded into a diversified primary, secondary and tertiary industrial system; (ii) enhance the ecological value of

rural landscapes and the important ecological services they provide, which can support diversified economic opportunities and (iii) enhance mechanisms for integrated urban-rural development such as attracting new talent, entrepreneurs and, thereof, new development opportunities to strengthen the innovation ability agripreneur ventures to benefit rural industry development. In this context, given the sectoral nature of rural services, improving rural services efficiency would require both strengthening sector institutions as well as promoting cross-sector policy
synergy, coordination and cooperation among responsible government departments,;

(ii) In parallel to improving the efficiency of agricultural service, **key for the promotion of agripreneur ventures would be the establishment of intelligent rural platforms (or agribusiness entrepreneurship centers)** based on ITC technologies. Their roles would be to provide market research and linkages, business models, business networks' identification targeting clients, business mentoring and coaching, linkages with partnering financial institutions, as well as providing up-to-date technological information as well as business and technical training and facilities. With regard to training, a particular attention should be given to building local entrepreneurship capacity at the local (rural) level, including improving local capacities for planning, monitoring and evaluating business activities that would bring value-added to rural products and advance the growth of local innovative agribusiness enterprises;

(iii) **Enhancing innovation through agripreneurship.** In this regard, specific measures should be promoted to support start-up rural business, namely through providing incentives such as tax break, subsidies, access to finance and improved financial products, support from extension services and reduced administrative burden; and

Improving rural financial services. Availability of adequate financing systems is certainly a key element to consider for the development of agripreneurship. Despite many progresses made over the past 20 years, existing financing institutions generally offer few financial services tailored to the need of agripreneurs., thereof undoubtedly inhibiting the development of agri-based industries. For the time being, there are also very few rural enterprises with bankable business models, such enterprises often lacking business management knowledge capacity, collateral, credit history, etc. required for well-founded investment decisions. Nowadays, however, innovative digital marketing channels and services have grown significantly, thereby opening the door to new options for agripreneurs to access financial products such as saving schemes, loans and money transfers. Yet, to support agripreneurs, there needs to be adequate financial services, which can meet the demand of start-up rural industries, such as low interest rates and favorable lending conditions to finance stand-alone working capital, investments, capital rebates and provide for combinations with grant and interest rate subsidies. For financing agripreneurs' highly innovative enterprises at an early stage of development (notably for community-driven rural industries identified by communities) matching grants would be required- Capacity building and training (notably to
build up entrepreneurship skills) business appraisal, due diligence, risk assessment and

financial management should be included in matching grant financing arrangements.
– stable and predictable agricultural market environment structures – stable and unbiased access to information on the former – full and open information channels for free use by stakeholders

QUESTION 5: IN YOUR VIEW, WHAT EXISTING PARTNERSHIPS IN THE CONTEXT OF SDGS COULD CONTRIBUTE TO HIGHER VALUE CREATION OF THE AGRICULTURE PRODUCTS? OR WHAT ARE THE NEW PARTNERSHIP ARRANGEMENT THAT FAO SHOULD CONSIDER?

UN/IO

Not an area of WTO expertise.
Voluntary sustainability standards (VSS) represent an opportunity a market-based tool to achieve SDGs. Voluntary sustainability standards (VSS) are norms and standards designed to ensure that a product is produced, processed or transported sustainably in order to contribute to specific environmental, social and economic targets.
FAO is a member of the United Nations Forum on Sustainability Standards (UNFSS). FAO can consider working within the context of UNFSS to advance value creation of the agricultural products.
Partnerships with trade related initiatives. This could build on the earlier work done by FAO & ECDPM on linking agriculture and trade initiatives in Africa in particular.
Stronger collaboration with our sister UN agencies – UNIDO, UNEP. Also research institutes such as IFPRI. There is also a big gap in support to business schools – with learnings needed on how to create a learning nexus between agrifood related disciplines and business.

Government

Partnership between Academia – Private Sector – Civil Society could contribute to higher value creation of the agriculture products by putting together knowledge, experience and entrepreneurship.
More collaboration with private sector for sustainable sourcing

Research/Academics

With universities a. The SDGs and agriculture can be facilitated through a three-pronged and circular approach that prioritizes environmental sustainability, decent work and value addition. b. An incubator/accelerator programme can drive this process.

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To achieve the sustainable agriculture goals, a socially inclusive strategy must be designed. It must be such that it benefits the poor, landless, women, scheduled castes and tribes. Some of the existing partnerships include- -Use of technology to reach masses -Promoting Natural and organic fanning and showcasing its benefits on health of people and soil. -Conserving natural resources -Promoting some indigenous varieties which perform well in the location. -Going for fortification of the agriproducts and delivering best in quality product to consumer -Utilizing the renewable energy sources wherever possible like thermal energy for logistic arrangements of agricultural! produce. -Educating and training fanners on sustainability and its importance for future generation - Higher value of the product may be quantified by the lesser harm it causes to the environment
Public-private partnerships – i.e. some agribusiness companies are already working with their farmers to diversify income streams however the issue is developing/connecting to markets where these farmers can sell these products.
In addition, when the products have basic/small flaws and don't meet grocery store standards, they aren't purchased, even though they are perfectly good products. Need to change or lower standards when it comes to appearance of products purchased and sold in stores; or connect with other offtakes who can process these flawed foods into foods like sauces, chips, etc.

Agronomist

- One CGIAR is a partnership that brings together multiple research centers from around the world to promote improved technologies and policies that will raise productivity and sustainability of agriculture. - One promising initiative is the Zero Hunger Alliance and Fund, which would aim to defeat hunger, and to serve as an international mechanism to assist the participating countries in the development and implementation of their zero hunger plans.
Agripreneurship development has the potential to contribute to several Sustainable Development Goals, and notably; No poverty (SDG 1); Zero hunger (SDG 2); Decent work and economic growth (SDG 8); Industry innovation and infrastructure (SDG 9), Responsible consumption and production (SDG 12); Climate action (SDG 13); Life on land (SDG 15); and Partnership for the goals (SDG 17).
all efforts that help in facilitation of information exchange and knowledge on all matters of primary production and value chains

QUESTION 6: IN YOUR VIEW, WHAT CROSS-BORDER ARRANGEMENTS ARE NEEDED TO FACILITATE EXPORTING OF THE AGRICULTURAL PRODUCTS AND SERVICES THAT COULD

PRIVILEGE THE LEAST DEVELOPING COUNTRIES?

UN/IO

The WTO has numerous instruments through which to promote LDC exports of food and agricultural commodities, such as: Special and Differential Treatment provisions across all WTO Agreements, including the WTO Agreement on Agriculture; the Enhanced Integrated Framework (EIF), and the Standards and Trade Development Facility (STDF). The SubCommittee on LDCs is mandated to look at systemic issues of interest to LDCs in the multilateral trading system. It is subsidiary to the Committee on Trade and Development.
Effectively enforcing the Duty-free Quota- free arrangements (DFQF) Simplification of the rules of Origin procedures
The EIF's Diagnostic Trade Integration Studies provide analysis for each LDC with respect to trade constraints and opportunities. For most LDCs many of these relate to agriculture. Many constraints relate to issues around trade facilitation in facilitating the international movement of the products. Knowledge of and improvements with respect to standards, including SPS are needed (see briefing note https://trade4devnews.enhancedif.org/en/system/files/uploads/eif_stdf_sps_briefing_note_apr2016_e_3_0.pdf?file=1&type=node&id=3930 and full report also available).
N/A

Government

Collective solutions to comply with sanitary and phytosanitary measures and cross-border controls, such as a body responsible to understand requirements to export and translate them to producers and a body responsible for dealing with trade facilitations procedures at ports, airports and borders. In addition, quota-free, duty-free agreements with LDC countries under the Enabling Clause of GATT/WTO.
Generalised System of Preferences (GPS); support in overcoming the “last mile” , i.e. connecting sellers with buyers

Research/Academics

Adjustment of tariffs
Trade financing which is tied to a credit guarantee scheme would make investment affordable and improve the return on investment at the early stages of business development.

International Advocacy Org.

Excess production after national consumption must be exported. This wi.11 help in stabilizing the prices in the domestic markets. This will also facilitate distribution of nutritional food to least developed countries. To facilitate the exports to other countries, commodities can be selected depending on the eating habits and preferences.

Price premiums for sustainably-produced goods

Agronomist

- Investing in connectivity infrastructure (roads and other transport, as well as digital services) to improve access to markets and encourage e-commerce - Support for the creation of and participation of farmers in producer organizations, cooperatives and similar organizations to increase their market power when linking to international markets - Support to local producers in complying with international standards for quality and sustainability - Reduction in barriers to trade or market distorting subsidies in both the global North and global South
I don't have sufficient experience in the trade of value-added agricultural and forestry related products to fully answer this question, but the only thing I could say it that when rural enterprises are able to utilize business processes and resources to convert agricultural or forestry or fisheries commodities into higher-margin products, there should be no impediment to compete even in the export market providing that they comply with international trade standards (e.g. Nagoya Protocol for products originated from biodiversity). If the export markets are successfully tapped, this can stimulate even greater farm or ecosystem production, thus bringing more income to rural enterprises and even farmers who work together with them.
– removal of all trade inhibiting regulations and barriers – sustainable and predictable market terms

Annex 2

Annex 3 records the inputs provided by the respondents of the Second Round. It was conducted by using the same six questions that were used during the First Round and supplemented by a synthesis review of the findings from the First Round.

Four respondents participated in the second Round representing a diverse group of organizations.

QUESTION 1: IN YOUR OPINION, WHAT AGRICULTURAL POLICY INTERVENTIONS ARE LIKELY TO SUPPORT SUSTAINED AGRIPRENEURSHIP IN THE RURAL AREAS AND PROVIDE ECONOMIC OPPORTUNITIES FOR THE YOUNGER GENERATIONS IN DEVELOPING COUNTRIES?

UN/IO

- Trade agreements for exporting regionally and beyond the continent.
- Strengthened rural to urban linkages, esp in accessing markets
- Improved or enhanced credit facilities that support informal traders. In addition, appropriate regulatory framework to support the protection of informal traders from exploitation.
- Improved infrastructure and services (energy, roads, education and health services etc). The youth would only prefer to remain in the rural areas if there was such infrastructure and services
- Robust agriculture value chains with links to the markets both locally and regionally. It is potentially interesting for the youth to not only engage in producing primary crops/horticulture or livestock farming, but to also add value to this primary produce.
- The roll out of AfCFTA offers a good entry point for strengthening agripreneurship.

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Formation of farmers' collectives and linking them with primary and secondary processing and marketing
We do a lot of work on youth entrepreneurship, and while it isn't agriculture-specific, I think many of the bottlenecks we find are relevant. Youth do not have access to credit and capital as they tend to have few assets and little or no credit history, so interventions to get them financial resources are critical. In many places they also do not have the network they need to access markets (they don't know as many processors, transporters, and/or middle men). There are many innovations using cell phones to reduce middlement, share price information, and improve market access that could be scaled up. The situation is especially challenging for young women who face further discrimination/marginalization, as well as ethnic/religious minorities.
Clearly finance is one of the main barriers affecting agripreneurs in growing and scaling their business. A lot of developments are underway to reduce risks (blended finance etc), however this is still not yet reaching those who really need it – at least this is the case across Africa where we do most of our work. Many agripreneurs have not structured their enterprise with a clear business plan including financial projections and a concise pitch to convince investors. One of the respondents highlighted the importance of "Training on types of financing and capacity building as to how to access it - Connections with investors; business coaches and trainers to help further develop new ideas and technologies". We have found that with this type of training young agripreneurs can raise the finance they need – but it does not "fall from the sky" it takes work and patience. I think that this aspect could come out a bit more strongly in your report.

QUESTION 2: FROM YOUR EXPERIENCE, WHAT ARE THE MAJOR BARRIERS INHIBIT RURAL DEVELOPMENT AND AGRICULTURAL PRODUCTIVITY IN DEVELOPING COUNTRIES?

UN/IO

Lack of infrastructure (energy, lack of connectivity, lack of infrastructure to improve productive capacities and weak systems to connect to urban or wider markets. In Namibia particularly lack of knowledge in terms of modern agriculture methods and techniques. The knowledge gap as it relates to business acumen to be able to operative thriving business in this sector. General lack of service delivery and limited opportunities for agro-manufacturing Limited investment in the agriculture sector, esp targeting smallholder farmers is a big deterrent

International Advocacy Organisations.

Weak land tenure system, underdevelopment of linkages between agriculture and rural non-farm economy
The barriers above (Question 1).
Another comment was "in parallel to improving the efficiency of agricultural service, key for the promotion of agripreneur ventures would be the establishment of intelligent rural platforms (or agribusiness entrepreneurship centers) based on ITC". One of the benefits of the COVID pandemic was a huge increase in connectivity in rural areas so smallholder farmers are getting more ready to benefit from such resources. We ran a virtual Business Readiness training for 200 smallholder farmers in South Africa – over 60% of whom had never followed any type of webinar or on-line training and only a few had access to a computer. The training was very successful and the participants remain highly engaged sharing information daily even more than one year later. So reaching farmers in remote areas at scale is now possible.

QUESTION 3: IN YOUR OPINION WHAT TYPE OF SERVICES IN AGRICULTURE COULD PROMOTE GREATER INCOME GENERATION THROUGH AGRIPRENEURSHIP OR BUSINESS DEVELOPMENT FOR THE SMALL FARMERS OR YOUNG PEOPLE?

UN/IO

- Agro-processing and manufacturing
- Automated business planning and support business services
- Financing for small scale farmers including insurance covers that respond to some of the challenges experienced
- Encourage formation of small cooperatives to ensure collaborative growth and to enhance resilience

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Marketing and business management including financial management
Microcredit, or alternative forms of lending. Mechanization in some areas. More on-farm processing or local processing to add value. Investment in cold chain for greater market access. All this would generate local employment.
Regarding the point about an "ecosystem approach to agripreneurship development will aim to safeguard the investments made for agripreneurship". We have found the framework from Daniel Isenberg very useful and used this in deep dive studies in several countries to identify gaps and opportunities consisting of domains of entrepreneurship ecosystem such as policy, finance, culture, supports, human capital, markets.

QUESTION 4: IN AN IDEAL WORLD, WHAT TYPE OF BUSINESS DEVELOPMENT OR ENTREPRENEURIAL INITIATIVES IN THE RURAL AREA MIGHT ACHIEVE AGRICULTURAL SUSTAINABILITY THAT FAO SHOULD INITIATE OR SUPPORT
ESPECIALLY WHERE YOUNGER GENERATION MIGHT CONTRIBUTE AND BENEFIT?

UN/IO

- Thriving cooperatives or savings groups. This also builds economies of scale and distributes risks
- Strengthen food systems value chains capturing value from respective rural areas

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Formation of farmers' collectives with strong backward (inputs side) and forward linkages (marketing side)

I also think there is a lot of potential for mobile-based services to improve yields through extension and education, sharing weather data, making recommendations on soil nutrient management, etc.

-

QUESTION 5: IN YOUR VIEW, WHAT EXISTING PARTNERSHIPS IN THE CONTEXT OF SDGS COULD CONTRIBUTE TO HIGHER VALUE CREATION OF THE AGRICULTURE PRODUCTS? OR WHAT ARE THE NEW PARTNERSHIP ARRANGEMENT THAT FAO SHOULD CONSIDER?

UN/IO

- Strengthen partnership with UN sister agencies esp UNDP and ILO
- Engage rural and local leadership and the communities
- Private sector (retail, manufacturers, producers, insurance companies included)
- CSOs

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Bilateral partnerships such as the India-Israel Agriculture Project and trilateral development cooperation projects such as the USIAD's Feed the Future Programme

FAO should consider developing trilateral development cooperation model – with technical knowledge exchange between the FAO and agricultural institutions in developing countries and its implementation in other developing countries with similar agri-climatic zones

Unfortunately I do not have a lot of ideas here.

QUESTION 6: IN YOUR VIEW, WHAT CROSS-BORDER ARRANGEMENTS ARE NEEDED TO FACILITATE EXPORTING OF THE AGRICULTURAL PRODUCTS AND SERVICES THAT COULD PRIVILEGE THE LEAST DEVELOPING COUNTRIES?

UN/IO

- Encourage South - South knowledge transfer
- Deliberate efforts to develop cross border value chains

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Reduction in tariffs, technical assistance and capacity building for harmonisation of non-tariff measures, agri-trade specific trade facilitation measures, particularly logistics services such as cold chain

I am not very familiar with this, but I know through our Science Panel for the Amazon that Europe is a major potential importer of Brazil nuts, but local producers have a hard time complying with (very necessary) hygiene and sanitary standards as there is a high risk of aflatoxin. There are similar issues around açaí. I suspect this affects many producers globally and many different commodities. They need capital to invest in equipment for local pasteurization and tetrapack, as well as training to meet standards. Again, if done well this would generate more value and jobs in rural areas.

You mention the critical issue of trade barriers, I think in the African context the African Continental Free Trade Agreement (AfCFTA) recently adopted by the majority of African countries should bring big benefits once implemented. I think it is worth mentioning.

"Sur quoi la fondera-t-il l'économie du monde qu'il veut gouverner? Sera-ce sur le caprice de chaque particulier? Quelle confusion! Sera-ce sur la justice? Il l'ignore."

Pascal

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Contact
www.ferdi.fr
contact@ferdi.fr
+33 (0)4 43 97 64 60