RVO RESEARCH AGENDA - RESEARCH LINE 3:

Agri-entrepreneurship

Key points

- * Agripreneurship refers to **using business skills and innovation in agriculture**, to improve farming techniques, outputs, products, and logistics, as well as tackling sector challenges through innovative improvements. Support for (youth) agripreneurship is growing due to the belief that **successful agripreneurs contribute to sustainable food systems**, employment, income generation, and positive social change, including gender and youth empowerment in low-income (rural) regions.
- * Agripreneurship is a subset of entrepreneurship that relates to the agricultural sector and is characterised by its core link to the environment. Unlike conventional entrepreneurship, agripreneurship is closely influenced by specific business, environmental, economic, and social factors. Significant dynamics that influence agripreneurship include climate vulnerability, smallholder farmer dominance, power imbalances, long and complex value chains, and quality control and markets, which shape doing business in the agri sector.
- * These unique circumstances of agripreneurship necessitate a different approach to entrepreneurship training and require different strategies of entrepreneurial ecosystem actors. Currently, conventional strategies towards entrepreneurship support are often used for agripreneurs as well, with limited positive results.
- * Gaps for practice include understanding how ecosystem actors such as incubators, governments and financial institutes can create an enabling environment for agripreneurs and how their approach should differentiate from their approach in other sectors, and the role and impact of policies, programmes and regulation on agripreneurship. Other gaps for practice include understanding how ecosystem actors (and partnerships) can enhance agripreneurs' skills and capacity, and market participation (market access, interaction in value chains, and value addition) and relevant gender needs.
- * Gaps for research include understanding scaling of agribusinesses while navigating value chain challenges. Further gaps for research include appreciating local innovations and mechanisms that support access to finance for agripreneurs, technology adoption of agripreneurs and impact (including digital tools), and the scope and impact of climate adaptative strategies of agripreneurs.

Introduction

This RVO research line discusses agri-entrepreneurship and its implications for entrepreneurship support and gaps for research in the Orange Corners (OC) Programme. The research line starts by

describing the need of entrepreneurship in the agriculture sector (<u>Part 1</u>) and draws attention to how it differs from 'regular' entrepreneurship (<u>Part 2</u>). The research line continues with a discussion on what this implies for entrepreneurship support (<u>Part 3</u>). The research line concludes with concluding remarks and recommendations (<u>Part 4</u>). Potential questions for research within RVO Orange Corners programme are suggested throughout the research line.

Part I: the need of entrepreneurship in the agriculture sector

In Africa, 70% of the population relies on agriculture for their livelihood (World Economic Form, 2016). Most of these are smallholder farmers managing up to 10 hectares (Smallholders and Family Farmers | FAO, 2013). Beyond Africa, out of the 2.5 billion people involved in agriculture and living in low-income regions, 1.5 billion work in smallholder farms ("Sustainability Pathways," 2011). In low-income regions, agriculture is not just about growing crops or raising livestock; it's about survival. With a rapidly expanding population, the link between agriculture and food security is a blunt reality that cannot be ignored. In simple terms, agriculture is the lifeline that keeps millions from going hungry. Food insecurity is a major issue in today's world, with over 783 million people globally affected (UN Report Finds, 2023). In less developed contexts, there is now a need to go beyond subsistence for productive and sustainable agriculture for both food security and for local economic development.

Farmers and others working in food systems are increasingly influenced by a range of global and regional factors. Firstly, climate change-induced droughts and floods significantly impact agricultural productivity, causing livestock loss and reduced production in South Asian countries like Bangladesh, while the prevalence of one-third of the world's droughts in sub-Saharan Africa increases vulnerability in these regions (Zami, 2023) (IMF, 2022). Secondly, a lack of adequate agricultural infrastructure and market access leads to post-harvest losses, reducing available food for consumption in Africa, despite having 60% of the world's uncultivated arable land, and spending about 78 billion US dollars annually on food imports (Global Law Practice, 2023). Also political instability and conflict, affecting an estimated 82% of Africans facing acute food insecurity, are major drivers of food shortages (Studies, 2023). Thirdly, the recent Covid-19 pandemic and conflict, such as the war in Ukraine, has led to inflation and directly caused food shortages all over the world (Africa Renewal, 2023). Fourthly, a rapid population growth in many low- and middle-income countries (LMICs), where many rely on agriculture for their livelihoods, increases the number of mouths to feed, while simultaneously reducing land plots and creating land tenure issues.

Box 1: What are food systems?

Food systems encompass the entire process of food production, distribution, and consumption, from farm to fork. They include the resources, actors, and activities involved in producing, processing, transporting, marketing, and consuming food. Food systems are critical to human well-being, providing the essential nutrients needed for health and nutrition. They also play a crucial role in economic development, providing livelihoods for millions of people around the world. However, food systems face numerous challenges, including climate change, resource depletion, food waste, and malnutrition. Addressing these challenges requires a holistic approach that takes into account the entire food system and its interactions with the environment, society, and the economy. Mapping a food system in a

country is essential for understanding its structure, dynamics, and challenges. It allows for identification of key areas for intervention and develop targeted strategies to improve the efficiency, sustainability, and resilience of the food system. Mapping a food system involves collecting and analyzing data on the various components of the food system, including production, distribution, consumption, and waste. This information can then be used to identify bottlenecks, inefficiencies, and opportunities for improvement. Entrepreneurship interventions in food systems should be targeted at specific value chains and geographical areas to maximize their impact. This approach allows for a more focused and tailored approach that takes into account the unique characteristics and challenges of each value chain and geographical area. For example, interventions aimed at improving access to markets for small-scale farmers in rural areas may focus on improving transportation infrastructure and market information systems. Similarly, interventions aimed at reducing food waste in urban areas may focus on improving storage and distribution systems (Dengerink & Brouwer, 2020)

A transformation in the agricultural sector in LMICs is imperative to increase productivity, yields and reduce costs. As the largest sector in many countries, its effective development stands as a key contributor to the realization of SDG1: no poverty and SDG2: zero hunger, as well as SDG 8: decent work and economic growth (Matshego, 2023). Part of the solution to some of these challenges may be found in 'agri-entrepreneurship', which involves using business skills and innovation in agriculture, to improve farming techniques, products, and logistics, as well as tackling sector challenges through innovative improvements (Mukhopadhyay, 2020). It is crucial for social and economic development, particularly in addressing the need for entrepreneurial initiatives to boost productivity and profitability in agriculture, especially in rural areas facing higher unemployment and poverty rates (Agricultural Articles, 2022).

Part II: What is agripreneurship and how does it differ from regular entrepreneurship?

2.1 Defining agripreneurship

While the fundamental principles of entrepreneurship apply to every industry, including the agri-sector, the context and specific challenges of the agri-sector are vastly different, which has led to the emergence of the field of agri-entrepreneurship.

Agripreneurs draw on business skills, technology and innovative practices to respond to challenges in the agricultural sector

Agri-entrepreneurship, often known as agripreneurship, deals

with the production, transportation, processing and selling of various agricultural goods and inputs. Agripreneurs are recognized as individuals willing to take risks by intentionally investing resources in agricultural businesses along the agricultural value chain to capitalize on opportunities for profit (Shantz et al., 2018; Walker et al., 2019). However, this definition is rooted in Western contexts, and may not fully cover the scope of agripreneurs in LMICs (Anderson & Ronteau, 2017). In responding to agricultural sector challenges, agri-prenreurs influence the scope of agricultural innovation, productivity, food security, employment and local economic growth and development. Recent literature emphasizes that the success of agripreneurs is impacted by the surrounding enabling environment, determining whether they establish profitable businesses or engage in agripreneurship as a survival strategy (Lubberink, 2019). Consequently, agripreneurship should be defined more broadly to apply to LMICs. Everyone, including (progressive) farmers, (unemployed) agricultural

graduates, transporters, cooperatives and cooperatives, and processers, can be agripreneurs. For example, the majority of smallholder farmers raise food for their families, but almost all of them also sell a portion of it to different marketplaces, and some are looking for ways to increase the profits made from sales. Thus, more and more smallholder farmers are therefore trying to become, or are already, small agricultural businesses.

There is increasing interest among aid actors in promoting (youth) agripreneurship. This stems from the belief that successful agripreneurs contribute not only to their individual livelihoods but also play a crucial role in fostering sustainable food systems, employment, and income generation, thereby contributing to rural poverty reduction and positive social change, including empowerment for gender and youth (Walker et al., 2019).

2.2 The context is what makes agripreneurship different and complex

Agripreneurship distinguishes itself from conventional entrepreneurship due to it being heavily influenced by the local context. Unlike regular businesses, agripreneurship is deeply connected to the specific environmental, economic and social conditions in which it operates, as explained in detail below. Such factors are especially crucial in LMICs and are key to grasping the complexities of agripreneurship. In this discussion, we will explore how the context shapes agripreneurship.

Several key environmental, economic and social reasons contribute to the heightened significance of context in LMICs agripreneurship:

Climate vulnerability: In LMICs, climate vulnerability significantly influences the landscape of agripreneurship. Climate vulnerability, marked by the increasing frequency and intensity of extreme weather events, poses great challenges for agricultural activities in these regions. Agripreneurs operating in LMICs must contend with the unpredictability of rainfall patterns, prolonged droughts, soil degradation and other climate-related uncertainties. Such challenges demand adaptive strategies and resilient practices to ensure the viability of agricultural businesses ("The Future of Food and Agriculture," 2017).

Smallholder farming dominance and rural development challenges: Smallholder farming dominates agriculture in LMICs, presenting specific challenges for agripreneurs. Limited land sizes, low yields due to various factors, and a lack of investment potential characterize this context. The modest land sizes and low yields necessitate tailored strategies for sustainable agripreneurship. Smallholder farmers as agripreneurs must find ways to optimize productivity within these constraints, considering factors such as seed quality, fertilizers, and unpredictable weather patterns. Land tenure issues add another layer of complexity, potentially discouraging long-term investments. Transporters, processors or sellers are also heavily impacted by the characteristics of smallholder farmers, since they often need to work with many individual farmers or cooperatives to get sufficient input for their services.

Power imbalances: Power imbalances are a pervasive issue in food systems in LMICs that affect the dynamics between different actors, and vertical and horizontal links. These imbalances often arise due to disparities in access to resources, information, and market opportunities. For instance, smallholder farmers, who make up a significant portion of the agricultural workforce in many African countries, are often disconnected and lack access to credit, technology, and markets, which limits their ability to negotiate fair prices for their produce. On the other hand, large agribusinesses and multinational corporations often have more bargaining power, allowing them to dictate terms and conditions that may be unfavorable to smaller players. Additionally, middlemen and traders who control access to markets and distribution channels can exploit their position to extract higher profits, further exacerbating power imbalances. These imbalances not only affect the economic well-being of

smallholder farmers but also have broader implications for food security, rural development, and social equity.

Long and complex value chains: Agricultural value chains are often long and involve multiple stages, including cultivation, harvesting, processing, packaging, transportation, and distribution before reaching the end consumer. The motivations of various actors along the agricultural value chain differ significantly, leading to a more complex landscape for agri-entrepreneurship compared to regular entrepreneurship. For instance, while a farmer's primary goal is to keep their harvest healthy to eventually eat and sell (part of) them, this is not necessarily driven by a desire to maximize profit. Instead, reducing the percentage of post-harvest loss is often a key focus. This contrasts with the motivations of a transporter, whose primary aim is to minimize costs and maximize profit. For example, they may wait until their truck is filled before starting transportation, and may also transport goods on the return journey to make efficient use of their time, truck, and chauffeur. Additionally, food processors want to buy necessities in large amounts, but the fragmented nature of many smallholder farmers means they have to source from multiple different farmers, each with varying quality standards. These differences in motivation create a complex environment where agri-entrepreneurs must navigate and balance the competing interests of various actors in the value chain.

Quality control and markets: Ensuring consistent and high-quality products throughout the entire value chain is a significant challenge (Dhivya et al., 2021). Factors such as weather conditions, soil quality, and pest management can directly impact the final product's quality. Additionally, the quality of products greatly differs perfarmer. Since buyers such as processors work with multiple farmers for their inputs, this can greatly affect overall quality. For example, a dairy factory in Burundi reported they work with over 1000 cooperatives to get sufficient inputs to produce their milk, yoghurts, cheese and ice cream. Each cooperative has a different quality level and managing the overall quality of their products has become a true challenge (Ouma et al., 2019). On top of this, in many LMICs it is extremely difficult for local processors to get their products certified, due to high costs or a lack of internationally recognized certification bodies (Derks et al., 2023), leading to a mistrust among potential consumers. In some cases, this has led to a reluctance to consume processed foods produced within their own countries stemming from several factors, including concerns about quality and a preference for "Western" or imported foods (Akinola et al., 2020; Andam et al., 2019). This phenomenon is often driven by a perception that food produced abroad is of higher quality and safer to consume. Additionally, the influence of Western media and advertising has contributed to a cultural preference for foreign foods, which are often perceived as more modern and desirable. This preference for imported foods has led to a decline in the consumption of locally produced and processed foods, which has negative implications for local farmers and economies. To address this issue, it is important to promote the consumption of locally produced foods and educate consumers about the benefits of supporting local agriculture and making entrepreneurs aware of the potential of important substitution. This can help to create a more sustainable and resilient food system that benefits both farmers and local consumers.

2.3 Gender and agripreneurship

Women are heavily involved in the agricultural sector and constitute 40-50 percent of the agricultural workforce globally and are "essential to planting, cultivating, and harvesting, as well as processing, logistics, and sales". In initiating and growing agricultural businesses, female agripreneurs face several constraints that affect their engagement and interaction in agricultural initiatives and global value

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¹ https://www.ifc.org/en/what-we-do/sector-expertise/agribusiness-forestry/promoting-inclusive-development/women-in-agribusiness-value-chains

chains. These include accessing productive resources, decision-making opportunities, and markets, which limit their full participation and contribution to the sector. In particular, women may have limited ownership and control of land inhibiting women's use of the land and access to key resources such as credit and inputs. Assets are typically controlled and inherited by male family members. This may be reinforced through discriminatory laws and agricultural policies. Cultural norms and customs may further impede women's movement, relations and collaboration and coordination influencing production and marketing, and decision-making around farming strategies, processing and marketing. Further to this, women may have less access to education and skills development, and vital agricultural services such as extension, impacting agricultural knowledge, abilities and use of innovation. Women may also struggle to access appropriate financial services due to both a lack of collateral and discriminatory laws that prevent women obtaining loans without family male authorization. At a household level, high domestic burdens (including collecting basic resources, cooking and childcare) further constrain women's participation in agri business and innovation. In rural business development, women's economic empowerment initiatives, such as microfinance programmes, skills training, and entrepreneurship support, play a pivotal role in permitting female agri-business ventures, and challenging traditional gender norms that restrict women's social and economic participation. Finally, women in agribusiness also suffer from a lack of 'gender responsive environments' (including in procurement to ensure women can engage in profitable value chains), sector segmentation and exclusion from agricultural associations (especially poorer and younger women) (AGRA 2021).

Research questions for the OC programmes:

- → How can agripreneurship be made more sustainable and resilient, particularly in the face of climate change and other environmental challenges?
- → What are the barriers to market access for agripreneurs, especially smallholder farmers and women? How can these barriers be overcome to create more inclusive and equitable market systems?
- → To what extent do power imbalances in the food systems affect our entrepreneurs? How can we be mindful of these imbalances?
- → How can OC contribute to making locally produced and indigenous foods popular again?
- → How can our interventions contribute to import substitution?
- → How can technology and innovation be leveraged to improve productivity, efficiency, and profitability in agripreneurial businesses? What are the best practices for integrating digital tools and platforms into food systems? → What are the policy and regulatory frameworks that support or hinder agripreneurship? How can these frameworks be improved to create a more enabling environment for agripreneurs?
- → What are the social and environmental impacts of agripreneurship, both positive and negative? How can these impacts be measured and managed to ensure that agripreneurial businesses contribute to sustainable development?
- → How can agripreneurial businesses be integrated into broader agricultural value chains to create more efficient and effective market systems?
- → What are the strategies for scaling and replicating successful agripreneurial businesses? Do these differ from other sectors?
- → To what extent do agripreneurs draw on or influence climate adaptative strategies in the agricultural sector?

Part III: Agripreneurship support

The differences in context of agripreneurship across regions and countries necessitate a tailored and nuanced approach to agripreneurship support. Agripreneurship support programmes must consider the specific challenges and contextual differences highlighted in Part II, and provide targeted interventions that address the specific needs and challenges of agripreneurs. This includes providing access to appropriate technology and innovation, facilitating market linkages and value chain integration, and building capacity in sustainable agricultural practices.

Conventional entrepreneurship programmes mainly focus on mentorship, pitching, creating personas, writing business plans, and optimizing business models. It is crucial to recognize that most of the agripreneurs' problems often have nothing to do with the business itself but with external factors such as **climate**, **value chain challenges**, **laws and regulations** (i.e. certification), and/or **market access** (i.e. power imbalance, quality and consumer perception). There is also some evidence that agripreneurship programmes have made the gap between the bottom-of-the-pyramid and those better off even wider (Derks et al., 2024). Thus, it is necessary to provide entrepreneurs in the agricultural sector with appropriate training and support that targets the real pain points (Making Cents International, 2020). Additionally, agripreneurship support programs should be designed in collaboration with local stakeholders, including farmers, cooperatives, and government agencies, to ensure relevance and effectiveness.

Agripreneurship is a relatively new and young field, and many aid actors are increasingly focusing on it to contribute to SDG's 1, 2 and 8. As seen in Parts I and II, agripreneurship is also rather difficult and providing support requires deep knowledge of local challenges. In this regard it is surprising to see that aid actors often fail to share their lessons learned, both in terms of what worked well and what did not, as well as the true impact of their programs (ILO, 2023). This lack of transparency and knowledge sharing can hinder the effectiveness and scalability of agripreneurship support initiatives. It also causes donors starting agripreneurship projects anew, to keep on reinventing the wheel. Additionally, many aid actors in agripreneurship support programmes fail to adequately measure the impact of their interventions, making it difficult to assess the effectiveness of their efforts and learn from their experiences. This lack of impact measurement can also limit the accountability of aid actors and their ability to demonstrate the value of their programmes to donors and other stakeholders. Moving forward, it is important for facilitating actors in agripreneurship to prioritize knowledge sharing, transparency, and impact measurement to ensure that their efforts are effective, scalable, and sustainable (ILO, 2023; Haugh, 2020).

The studies that do exist, focus on rather generic advice such as 'access to financing, adequate policy, increase market access, technical skill and business management knowledge', it seems more nuanced studies evaluating the impact of interventions, their unintended consequences as well as the exact context specific dynamics behind generic shortcomings is missing.

Research questions for the OC programmes:

- → What specific barriers are experienced by agripreneurs in OC countries? How can our interventions help to alleviate those barriers?
- → What are the educational and training needs of agripreneurs, particularly beyond just business management, financial literacy, and technical skills? How can these needs be addressed to build a more skilled and knowledgeable agripreneurial workforce?
- → How can financial products and services (such as OCIF) be tailored to meet the needs of agripreneurs? What local innovations and mechanisms support access to finance for agripreneurs?
- → How can OC measure impact of agripreneurship programs more effectively?
- → What interventions can help to increase transparency and knowledge sharing among donors and programmes?

Part IV: Concluding Remarks and Recommendations

Entrepreneurship in the Agri sector differs heavily from entrepreneurship in other sectors, due to environmental, economic and social factor such as climate vulnerability, smallholder farming dominance and rural development challenges, power imbalances, long and complex value chains, and quality control and markets. **These differences in context necessity a different approach to supporting agripreneurs.** However, support to agripreneurs often seems to follow rather conventional training structures, developed for entrepreneurial support regardless of sector.

Some important *practical* gaps for OC emerge related agripreneurship. First, OC is interested to understand how entrepreneurship support programs should be adapted to align with specific challenges agripreneurs experience, both in their entrepreneurial training, innovation fund and ecosystem development activities. Second, it is key to understand in more depth how standard factors influencing an entrepreneur such as access to finance, markets and policy differ for agripreneurs. Other *research* gaps of interest to OC and beyond include understanding scaling of agribusinesses while navigating value chain challenges.

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