

## **POLICY BRIEF: Challenges and opportunities for e-commerce and digital solutions among ethnic minorities: Insights from ten value chain pilot projects**

### **Context**

1. Digital technologies—including the Internet, mobile technologies and devices, digitally-delivered services and apps—are changing agriculture. It is the use of digital technologies, innovations, and data to transform business models and practices across the agriculture value chain, including production, post-harvest handling, market access, finance and supply chain management. Digitalization within value chains has the potential to provide a major boost to ethnic minority enterprises in rural Vietnam. E-commerce and digital applications in production, processing, and sales of products are widespread. These practices are enabled by high levels of smartphone penetration: about 43,7 million Vietnamese have smartphones, among which 53 percent use 3/4G technology<sup>1</sup>. Initially more confined to urban areas, online shopping is becoming increasingly popular among rural households—making rural buyers key drivers of growth for new or expanding businesses.<sup>2</sup>
2. The benefits of digital technology are increasingly shown in agri value chains, including among EM enterprises. This note draws on the lessons learned from the implementation of the Value Chain Initiative Contest (VCIC), where 10 EM enterprises received technical support from CRED in close collaboration with CEMA. This work which was financed by the 2<sup>nd</sup> Australia Bank Partnership (World Bank and Embassy of Australia in Vietnam). The experience of the ten entrepreneurs supported through this project confirm that small businesses perceive the main benefits of digital solutions to be: helping value chain actors to increase access to market (for example through e-commerce platforms such as Shopee, Tiki, Lazada and Voso), providing traceability and assurance (Good Agriculture Practice) for end users, and to a much lesser extent, improving actors' operational efficiency post-harvest.
3. However, today digital platforms are not leveraged to their full potential in support of growth of businesses and revenues. Instead, they often remain predominantly used for communication purposes. The most popular platforms known to—and to some extent used by—ethnic minority businesses include:
  - Zalo: is a very popular app, with various useful functions (phone calls, photos of products, group discussions, marketing). This is being used by most people in the country, including ethnic minority farmers and other actors along the same value chains, for communication and information sharing. It is hard to find someone in Vietnam without the Zalo app on their smartphone.
  - Facebook: this popular social media platform is increasingly used for sales and communication purposes. There are many examples of EM farmers, including several project owners of the VCIC program, who have acquired substantial sales through contacts established through Facebook accounts. As discussed with VCIC projects during the workshop on online marketing in December 2020, marketing tools offered by Facebook, however, are not widely used by EM, especially those in remote area, even when they do use social media. The requirement for bank card payment

---

<sup>1</sup> To ITC News (Vietnamnet)

<sup>2</sup> <https://vietnamnews.vn/economy/922220/more-people-in-rural-areas-shopping-online.html>

(credit card), delivery justification, and limited knowledge of the how the tool can be used are factors that undermine its use, which thus remain below potential.

- Youtube: is especially useful for EM farmers seeking technical information to help them improve production.
  - E-commerce platform: Amazon and Alibaba are two well known brands trying to promote themselves as effective solutions for export. In addition, many other local platforms are being built to link farmers to end markets. So far, Shopee, Tiki, Lazada are the most popularly platforms functioning as digital marketplaces in Vietnam. Yet, these platforms are mostly selling books, beauty products, home and lifestyle products, digital accessories, etc. There are newly developed platforms for agricultural products such as Vo So, Postmart, Muahangviet, etc., but they are not yet very popular. There have been efforts from different government agencies such as Ministry of Agriculture, Ministry of Trade and Ministry of Communication to discuss with Tiki, Shoppe to introduce fresh agricultural products on their platforms. This would provide opportunities to increase sales of even smaller farmers.
4. In spite of the increasing availability of digital solutions to support production and trade or retail, the success stories are limited, and mainly confined to private enterprises and more developed areas (e.g Red River or Mekong delta region). Many EM farmers have tried the current platforms (Voso, Shopee, Lazada) and there have been also many attempts to introduce digitalization in different value chain activities; however, the achievement is so far below expectation. For instance, most EM businesses in Lao Cai and Son La (two northern mountainous provinces in Vietnam) appear not to consider these platforms as effective sales vehicle, if they are aware of their existence at all. There are only a handful of examples of cooperatives/businesses in some low land areas, like in Bac Can, Thai Nguyen that reported securing sales from digital platforms – such businesses are not many. Another core cause of the challenges faced by EM in exploiting these opportunities is the remoteness and distance of their production areas to the warehouse, as well as the under-developed and poor logistics supports.

### Opportunities for increased adoption of digital solutions among ethnic minorities

5. Visible opportunities exist for a greater use of digital solutions in value chains for EMs. The VCIC activities reveal several entry points that could be exploited.
6. **Demand side:** consumers' demand for food safety and green products, which have clear origin and are traceable, can act as a driver for digitalization. Digital solutions so far provide the best vehicle for long EM value chains to deliver traceability or other evidence that show products' environmentally friendly values, like organic or biodiversity.
7. **Supply side:** there is an increasing interest among EM entrepreneurs, particularly younger ones, in the use of digital application for performance improvement in value chains' daily activities and sales, as witnessed also during the VCIC implementation. Young entrepreneurs from EMs see the potential of leveraging digital channels for finding and attracting customers. For example, community-based tourism services see the value in using social media platforms for marketing their products. Others see the value of online websites and apps to exchange knowledge and obtain technical information to improve farm production performance. For example, an EM cooperative in the VCIC project relied on social media platforms and the web more broadly to secure information on medicinal plants production.

8. **Pressure to match supply and demand in agri-value chains:** EM farmers often face the issue of over-supply across value chains and locations, especially in mass volume commodity sectors, where farms' products are sometimes even dumped off on the field due to the absence of buyers, e.g veggies from Moc Chau (Son La province) and Sapa (Lao Cai). The lack of sufficient access to markets, coupled with decisions on crops to be cultivated that are typically driven by high spot market price (rather than by consideration of long-term demand) are some of the reasons behind the mismatch. The type of information that could allow households and enterprises to make better investment choices, and reach more buyers, would be easy to access through digital channels.
9. **Service provision side:** more suppliers see and want to realize the opportunities for sales opened by digital solutions, which are perceived as helping improve effectiveness and efficiency of agri-value chains, including those with actors from EM groups. The attempt of many companies to bring One Community One Product (OCOP) products to e-commerce platforms or provide digital applications to facilitate farm management reveals interest in leveraging more digital solutions. For instance, Viettel is making efforts to attract OCOP products to its trading platform (Voso), and various applications for farm practice management; these have taken off for different reasons (discussed in the Point 9 – 12 below).
10. **Business environment enablers:** various development projects/activities in Vietnam are providing support for start-ups, a sector that appears mainly dominated by the development of digital applications. Many of these start-ups have been proposed to solve practical issues in agriculture-related activities. However, the support for start-ups is usually focused on identification of initiatives and incubation to prototype completion, not on the much more challenging aspect of commercialization, which requires customization to accommodate users' conditions, especially for EMs.

### Challenges to faster adoption of digital opportunities in value chains

11. **Knowledge and basic digital skills.** Not all EM farmers are familiar with smartphones and apps. This is especially the case among people aged 40 years and above, who usually find it hard to adopt new technologies. The VCIC projects suggest that digital solutions are picked up among younger projects' owners, such as the project owner producing H'Mong traditional clothes and accessories used online channels to promote and improve sales. Others have used real time communication opportunities offered by social media to connect with buyers of vegetables produced in EM farms.
12. **Applicability to EM contexts.** The array of digital solutions available to producers and sellers along value chains are most often not conceived with EM producers and products in mind. Tailoring solutions to their products, areas and in some cases language would provide greater opportunities for their adoption. Examples raised in the VCIC and other observations indicate, for example, challenges among agricultural products entrepreneurs. These range from farmers' finding it inconvenient to update activities on a smartphone in real time while working the fields, to inability to adopt accounting software designed for businesses in tea processing factories, due to the sector's uniquely differentiated processing practice.
13. **Internet coverage.** High speed broadband or cellular data networks are not yet available in many locations where EM enterprises are operating. Areas close to the main national routes can get strong 4/3G signals in contrast to areas far away from the main roads where the signal is weaker, if present at all. Ethnic minorities are more likely to live in remote areas, thus facing these additional difficulties. While sound data on smartphone ownership and use is scarce, there is evidence pointing to ethnic

minorities having fairly high access to cell phones (87%), although facing a gap with Kinh majority in terms of access and quality of 3G or 4G signal (35.6 versus 63.5%).<sup>3</sup>

14. **Tailored institutional support.** E-commerce and digitalisation are not at the forefront of local governments agenda for social and economic development planning. The responsible government staff, particularly in the EM areas, do not have the relevant IT skills and knowledge to support the EM.

## Implications for policy and future program supports

15. These insights from the VCIC initiative confirm the importance of advancing activities included in the NTP-SEDEMA, particularly in Project 10, which aim to increase the use of information technology to improve socio-economic development for ethnic minorities and mountainous areas, and Project 3, which includes activities in support of start-ups and EM entrepreneurship. As the Government of Vietnam starts to implement the NTP-SEDEMA, it can draw from the experience of the VCIC and other lessons on how to fully leverage the potential of digital technology:

### 16. Principles

- **Infrastructure investments.** The greater use of ICT for socio-economic development objectives enshrined in the NTP-SEDEMA needs to be sustained by continued investments in digital infrastructure, with a greater focus on including remote areas and more isolated communities, thus preventing that a wider gap in opportunities emerges. In parallel, continued improvements to the quality of such infrastructure for enhanced operational efficiency/effectiveness among EM are necessary.
- **Phased and targeted approach:** Because not all locations and products are adequately placed to adopt similar digitalization initiatives (e.g insufficient trade volume to justify the investment), a more phased and targeted approach is recommended, where quick wins, relevant to the ethnic minority context, are leveraged in the short term. Digital applications are to be selective to ensure the successful delivery of replicable pilots where the infrastructure exists and is sufficient (e.g. 3/4G coverage) and where solutions can be easily applied to ethnic minority products, local conditions, and value chain contexts. The VCIC experience showed the large untapped potential of simple tools for online marketing provided by social media (e.g. Facebook). Increasing entrepreneurs' familiarity and use of such basic tools can offer a starting point to grow their business in the short term.
- **Sustain seed investment through commercialization of products:** digitalization often involves a high level of initial investment to set up the business and technology, educate users, and adjust to emerging realities. A lack of investment in such activities often results in the solutions developed failing, even after showing potential at the conceptual level or launching phase. External support for enterprises in user training and product customization to help sustain these investments is therefore vital. NTP-SEDEMA Project 3 activities focused on start-ups have the potential to provide this much needed support. It is important that these activities extend beyond the initial incubation period, and that they support product development, advertising, sales, etc. through the more difficult phases of commercialization, for a sustained period of time.
- **Skills development:** Digital literacy remains a barrier to a fuller uptake of digital solutions. Training programs and opportunities to exchange knowledge need to be tailored to ethnic minorities'

---

<sup>3</sup> IPSARD, 2019. NTP Baseline Survey Report. The analysis is produced in World Bank, 2020. Shared Gains: Vietnam Poverty and Shared Prosperity Update. The household survey was implemented in 26 relatively poor provinces across all regions.

specific needs and be simple, as well as sensitive to social and gender norms (to ensure participation of women entrepreneurs), and language. Different approaches are needed for entrepreneurs of different ages. Online platforms and forums may be created to provide training and exchange knowledge specific among EMs engaged on similar issues.

17. **Support areas for greater use of digital solutions to improve value chain and livelihoods of EMs:** (a) Monitoring and resource management, (b) Improvement of access to production input factors, (c) Performance improvement at post-harvest processing, (d) Traceability, and (e) Online marketing and E-Commerce.

- Monitoring and resource management: NTP-SEDEMA's focus on leveraging ICT for program monitoring (Project 10) is extremely relevant. The aforementioned points around principles to improve use of digital technology (e.g. training users in digital skills, phasing and targeting solutions, etc.) will ensure that an adequate monitoring system is set in place, where beneficiaries can themselves contribute useful inputs to local implementers. An easy to navigate, regularly updated database containing information on projects is fundamental. It should respond both to administration and implementation needs by local authorities, but also to monitoring and reporting needs. The ability to use the system for timely analytics can help adjust the course of investments, improve investments, improve the performance of local institutions, and allow for better resource management. The databases should be enabled to monitor and report progress by location, in addition to industry, to facilitate adjustments reflecting for example more competitive crops and highlight any issue that deserve additional institutional support.
- Production input factors: Greater access to timely knowledge could help entrepreneurs improve their business models and production. This could be achieved through tailored digital platforms providing entrepreneurs with information on relevant input service providers (products, capacities, prices), technical knowledge of the inputs, and a forum to exchange experiences. Solutions would need to be piloted, and tailored to different products, ethnic groups, business sizes.
- Post-harvest processing: Insights from the VCIC and other experiences reveal that actors engaged in processing of agricultural products are better equipped to take up and roll out digital solutions. Post-harvest processing is also in line with Vietnam's ambition to move up the value chain, away from being simply a commodities supplier. There are numerous opportunities for digital application and automation in processing, which should be a key area for immediate support. The support must be tailored to business needs and show benefits to EM households that participate in the value chains where the digital solutions are applied.
- E-Commerce: Spearheading the e-commerce engagement by EMs will be key to achieve the objectives of the NTP-SEDEMA, particularly for Project 3 which will support enterprise development, as well as Project 10's ambition to support training in this area. Digital platforms can better connect actors along EM value chains. The platforms are designed to be practical and usable by, and specifically for, EM farmers – e.g. for online Business to Business (B2B) or business to consumers (B2C) purpose. VCIC lessons reveal that this marketing tool does fit very well with ready to use products such as the production of handicrafts, essential oils, baby bath products, and herbal tea. However, it appears to be less relevant to tourism businesses, as well as the sales of vegetables or beef. That said, there are tens of million people who are visiting these e-commerce platforms, so even for those types of sectors having a presence on these sites can benefit from improved visibility and boosting. Products like tourism, vegetables or beef can be

packaged as vouchers when marketed on these platforms. Different government agencies such as the Ministry of Communication, Ministry of Trade, Ministry of Agriculture need to combine their efforts to support increased e-commerce uptake among EM. Here, CEMA would play a very important role to coordinate among these agencies, or allocate the resources to pilot the model of a digital B2B or B2C platforms for EM.

#### 18. Implementation model:

- **Capacity building:** digital education for EM entrepreneurs as well as local administrators is urgently needed. The development of basic curricula can draw on the experience of approaches previously adopted for food safety education targeting EM farmers. Any training should aim to at least generate a basic knowledge on digital applications and prepare EM for the introduction of digital tools either at production, processing or marketing stages. In parallel, local administrators will also benefit from improved knowledge of using technology for monitoring and reporting purposes.
- **Partnerships:** are key vehicles for the identification and expansion of digital opportunities in EM value chains and livelihoods development. The partnerships can be diverse to accommodate the multi-faceted contexts EM enterprises operate in. For instance: public and research organizations to build up a supply base database, a public-private partnership to set up traceability system in specific value chains, producer and processors or service providers to establish efficient linkage across value chains.
- **Start-up support:** to facilitate initiatives either from EM communities or from other actors in the market system that can potentially benefit the EM entrepreneurs. There are already proven mechanisms in place to promote ideas from start-ups, e.g. contest for start-ups with digital solutions to respond to specific issues (like impact addressing Covid-related challenges) and improve value chain actors' resilience. Hackathon, Accelerators, and Incubators can be the models for start-up support Hackathons can help identify ideas for EM digital solutions, Accelerator can help accelerate the ideas to be applied in EM value chains on a pilot basis, and Incubators to provide more specific supports for commercialization of EM products.
- **Innovation funds:** are highly recommended as a mechanism for deploying e-commerce or digital solutions for EM value chains. The lack of financing is always a bottleneck, especially for EM enterprises where the conditions for realizing the initiatives are constrained and needs are diverse and highly contextual.
- **Cooperative ecosystem:** Vietnam's Cooperative Union has various programs that support improving market access for coops. The OCOP in particular has brought about huge benefit for farmers so far. Integrating the promotion for digitalization for EM farmers in Vietnam's Cooperative Union eco-system will help to capitalize and synergize on connectivity of communities already built in this system.