With impacts from climate change, alterations to land usage, and an aging farmer population, food security has become a significant issue for Indonesia in recent years. During the Jakarta Food Security Summit in 2020, President Jokowi called on business players to leave behind old paradigms and embrace innovation. One simple way to ensure innovation take-up and a revitalisation of the agriculture sector in Indonesia is for businesses to embrace young farmers more fully.

Youth as a Key to Building Resilient Agricultural Markets in Indonesia

PRISMA is a bilateral program between the Australian and Indonesian governments and aims to forge a more resilient, inclusive, and stable agricultural sector in Eastern Indonesia. The program has found that young farmers between the age of 18 to 35 are more likely to be early adopters of the new technologies, challenge traditional practices in agriculture, and take up innovation.

While the Indonesian Inter-census agricultural statistics note that farmers under 35 years make up only 12 percent of the national population this is because they do not include farmers beyond the head of the household. A youth farmer study in East Java undertaken by PRISMA suggests a much higher percentage of youth are engaged in the agricultural sector when including other supporting farmers within the household.

Young farmers are an untapped market segment that the private sector could leverage to improve good agricultural practices and farming innovation in Indonesia.

Take up of technology and innovation

One of the barriers to agricultural innovation in Indonesia is the aging farmer population. Older farmers have less access and are less likely to use technology. For example, the Indonesian Ministry for Communication and Informatics states that 43.5% of farmers use smartphones (2017). PRISMA study found that 88% of farmers aged 18 to 35 used their smartphones to access information about agricultural products and services. “I always look for tutorials or advice when things go wrong with my crops from social media”, noted a study respondent.

However, further research on Information Communication Technology by PRISMA found that only 5-6% of older farmers used their phones for this purpose.

Older farmers are also less likely to adopt new methodologies.
or products, remaining loyal to products for years. On the flip side, PRISMA also found that 74% of respondents are either instant adopters of innovative agricultural methods or adopted after doing initial research. Only 20 percent of young farmers stated they would wait for others to adopt before they would. This is in strong contrast to older farmers who are less likely to change methods and who need significant convincing through demonstration plots and intensive processes before they would consider change.

One way to improve productivity and prevent crop loss is using machinery. The study showed that young farmers prefer using mechanized approaches, with 75 percent of farming youth already using machines, such as tractors and threshers. Furthermore, 70 percent of young farmers not currently using machinery were open to trying new technology.

The openness of youth to technology and their readiness to try innovative approaches makes them a key market segment for the private sector. Agri-businesses could leverage the readiness of youth farmers by adjusting marketing and communication strategies towards youth and engaging youth in more meaningful ways.

**Young farmers as change agents**

Despite the long-prevailing view that young people are no longer interested in farming and are leaving rural areas in search of blue and white-collar jobs in the cities, PRISMA's study shows that 75 percent of young farmers plan to stay in agriculture. Young farmers and farmhands are, therefore, the foundation of Indonesia’s farming future, and this can be utilised by the private sector in marketing new approaches.

PRISMA's study showed that if you looked beyond the ‘main’ farmer in rural households - usually the male head of the family - other family members (83%) between the age of 18-35 were still highly engaged in the farming activities as supporting farmers. This means under 35ers are a vast untapped market segment for the private sector. While youth farmers may have less power over household decision-making, they could be powerful influencers within the household in convincing lead farmers to adopt and use innovative approaches and products.

Young farmers are known as information providers in the community, both within and outside the household. PRISMA's study showed that 77 percent of youth shared information they gained through social media and the internet about agricultural products and approaches to their peers. This finding can be utilised by business for their market penetration strategies. Engaging youth using the social and online platforms they use is a good way to assist businesses to accelerate product and innovation adoption in the agricultural sector.

**Raising the voice of young farmers**

Giving people a voice universally engenders engagement and motivation. If the private and public sector engaged more actively with young farmers and involved them in the market, this would go a long way to mobilising them as change agents. Using young farmers as the face of media and education campaigns, for example, would help dispel stereotypes that older farmers know best.

The PRISMA study found that 54% of young farmers were still referring to parents as their main source of knowledge and experience. One of the survey respondents also stressed that farming knowledge is usually hereditary since training is not available. However, 30% said they adopted practices and gained knowledge from self-learning. By specifically targeting youth through the proper channels, agri-business practitioners would benefit from the increase in engagement on their products, while breaking youth dependency on parents and allowing new ideas to flourish.

**Market resilience**

The COVID-19 pandemic and the subsequent disruption to agricultural supply chains has highlighted the need to build resilience into market systems. Only by adapting and transforming, or as a minimum being able to respond to unforeseen events, will agricultural systems be resilient. The private sector needs to identify and mobilise resources in creative ways, such as youth farmers.

Businesses need to be as flexible and adaptable as possible to respond to both small and large shocks in the agricultural sector. While improving productivity is one part of the equation, the other is promoting diversity and using these resources in novel ways to respond to emerging opportunities.

The digital age and government push to leave behind old paradigms provide the perfect opportunity for the Indonesian private sector to revisit how they engage young farmers. Tapping into this under-utilised resource will help push Indonesia towards more significant innovation within the agricultural sector. In the long run, engaging and promoting the role of youth will also lead to a more secure food sector and greater resilience within the agricultural market system.