



# COVID-19 AND RURAL FARMERS IN THE DRY ZONE OF MYANMAR

## RESULTS OF A RAPID ASSESSMENT

United Nations Development Programme  
Myanmar

September 2020





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UNDP is the leading United Nations organisation fighting to end the injustice of poverty, inequality and climate change. Working with our broad network of experts and partners in 170 countries, we help nations to build integrated, lasting solutions for people and planet.

In Myanmar, UNDP is committed to helping the Government and citizens in their effort to achieve its national development goals towards a peaceful, prosperous and democratic Myanmar. UNDP Myanmar partners with government, civil society, development partners, funding organisations and the private sector.

This report presents findings from a rapid assessment of the socio-economic impacts of COVID-19 on farmers across two townships in Mandalay Region in the Dry Zone of Myanmar. Surveyed farmers and many other actors currently participate in UNDP's Sustainable Enterprises and Agricultural Development (SEAD) project implemented together with the Department of Agriculture, the Livestock Breeding and Veterinary Department, Department of Agricultural Research, the Department of Meteorology and Hydrology and Ooredoo Myanmar.

We would like to express our gratitude towards the 650 farmers for their participation in the rapid assessment.

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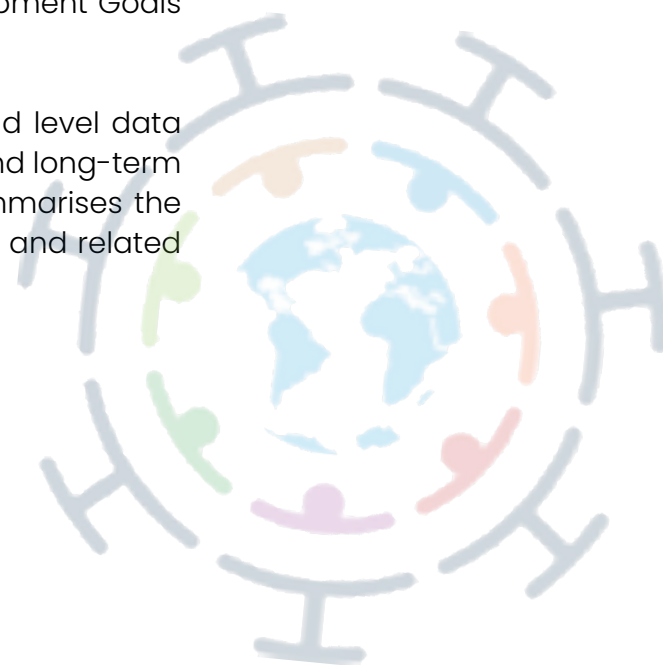
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COVID-19 is an infectious disease caused by a novel coronavirus, which was first transmitted from an animal, most likely bats, to humans in China late in 2019. It is the third zoonotic coronavirus outbreak after SARS (2002) and MERS (2012). Because of its genetic similarity to SARS, the novel coronavirus is now referred to as SARS-CoV-2 <sup>1</sup>.

Since its outbreak in December 2019, COVID-19 has evolved into a pandemic affecting populations worldwide. In late July 2020, there were 16.5 million confirmed COVID-19 cases. Around 655,000 people have died over the past seven months. Thus far, Myanmar recorded 351 cases of whom six succumbed to the disease <sup>2</sup>. Myanmar ranks at 60 out of 195 countries listed from most to least vulnerable on the Infectious Disease Vulnerability Index <sup>3</sup>.

To prevent widespread transmissions until effective treatments or a vaccine are available, governments worldwide closed their borders and often imposed strict lockdowns or social distancing measures for their citizens. These interventions have caused widespread disruptions to people's lives and economies. Forecasts predict stagnant or declining growth for many countries around the world as industries shut down and supply chains were severely disrupted. The number of people in poverty will probably rise by the millions and past progress on the Sustainable Development Goals will in all likelihood be partially lost again <sup>4</sup>.

Despite emerging macro level data and forecasts from models, household level data are often still missing for a situational overview and to direct future short- and long-term support interventions targeted at vulnerable communities. This report summarises the findings of a rapid assessment of the socio-economic impact of COVID-19 and related measures on rural farmers in the Dry Zone of Myanmar.



The Dry Zone refers to a geographic area in central Myanmar<sup>5</sup> characterised by scarce water resources, thin vegetation cover, degraded soils and severe erosion due to strong winds during the dry period and due to uneven rainfalls during the monsoon season. It is one of the most climate sensitive regions of the country yet also the third most densely populated area of Myanmar.

Around 15 million people<sup>6</sup> live in the Dry Zone most of whom engage in subsistence agriculture, small scale livestock farming and seasonal employment on farms. Many citizens seek opportunities as migrant workers elsewhere in Myanmar and Asia. Due to both high population densities and unfavourable climatic conditions the environment is heavily degraded and there are related high concentrations of (chronic) poverty and food insecurity<sup>7</sup>.

The Sustainable Enterprises and Agricultural Development (SEAD) project and previous UNDP projects address the present situation through interventions to protect the natural resource base, climate smart and gender focused agricultural sector activities, support of rural communities and business entrepreneurs and a strengthening of capacities of local government agencies.

Together with its partners in government, research and the private sector, UNDP deploys a range of tested approaches and innovative ICT technologies. For example, farmers are now able to listen to podcasts and webinars around agriculture or livestock rearing best management practices. Mobile wallets and payment options will facilitate access to financial services and insurance for farmers and entrepreneurs alike. Virtual marketplaces will ease tapping into options for storage facilities or identifying potential buyers.





The rapid assessment of the impact of COVID-19 on farmers of agricultural crops and livestock in the Dry Zone was conducted under the framework of the ongoing SEAD project. UNDP and its partners work with communities in 130 villages in the two townships of Myingyan and Nyaung U in Mandalay Region. In the project villages, there are a total of 26,146 farm households and nearly 120,000 individuals. About 20% of all households are headed by women.

A survey had already been scheduled to take place from March until June of 2020. UNDP's implementing partner Cesvi adjusted its closed-ended survey questions in May (i.e. after Myanmar's lockdown period in April) to also accommodate the retrieval of data on the situation of farmers under COVID-19. All respondents contacted before the inclusion of COVID-19 topical questions were contacted again. The team interviewed farmers in their villages in the Myanmar language. The interviewers followed village specific and general guidelines of social distancing, maximum group sizes, hand washing and the wearing of face masks during their visits.

The team surveyed 650 households in 65 villages across Myingyan and Nyaung U townships<sup>8</sup>. The sample size is sufficiently large to represent the total project population and farm households at a 99% confidence level (5% margin of error). Yet, whilst it does not statistically represent all farming communities in the Dry Zone, farmers across the area are likely to face the same challenges because they share similar characteristics and as public measures were imposed indiscriminately.



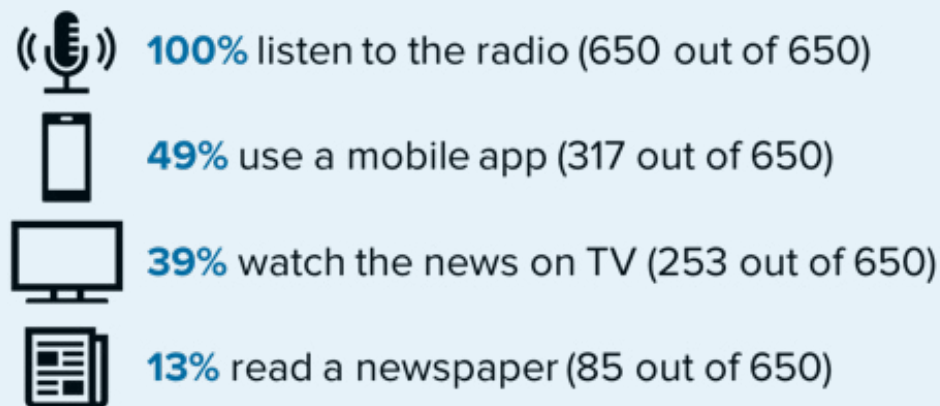


At the onset of the COVID-19 pandemic the government of Myanmar via the Ministry of Health and Sports (MoHS), the UN Country Team, NGOs and many other actors started a massive information campaign in the Myanmar language to inform the general public about COVID-19 and the various measures that can be taken to prevent the virus' transmission amongst communities <sup>9</sup>.

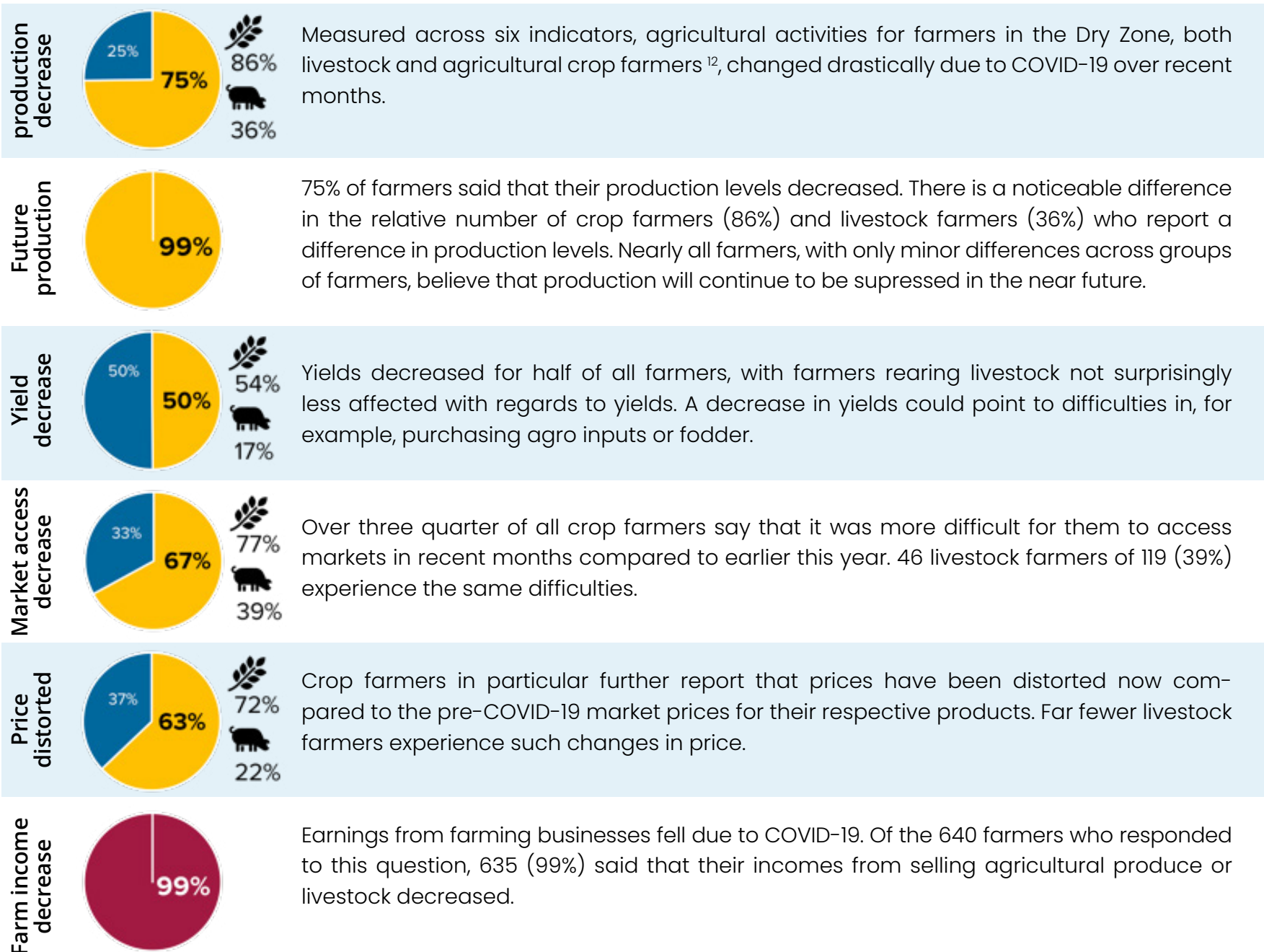
All surveyed farmers are informed about COVID-19 and the dangers the disease poses to one's health. When queried about various media outlets, all farmers confirmed to have been listening to the radio. Nearly half of all farmers said to also have been using a mobile app <sup>10</sup> on their smart phones. A little less than 40% watch MRTV (Myanmar Radio and Television). Newspapers are consulted but less frequently.

In general, farmers mentioned the following mediums from which they received COVID-19 information: MoHS, Myanmar Radio (state controlled), MRTV (state owned), Township Medical Offices, Township Administrative Departments and Village Administrators. Note that all outlets are public bodies or state controlled. Whilst basic COVID-19 information appears to have been relayed successfully, the stringent control and censorship of the media has been criticised <sup>11</sup>.

The UNDP project team noted that information campaigns up until now focused on basic information but not yet plans about a safe reopening of the economy or sectoral support measures.



# FARM INDICATORS

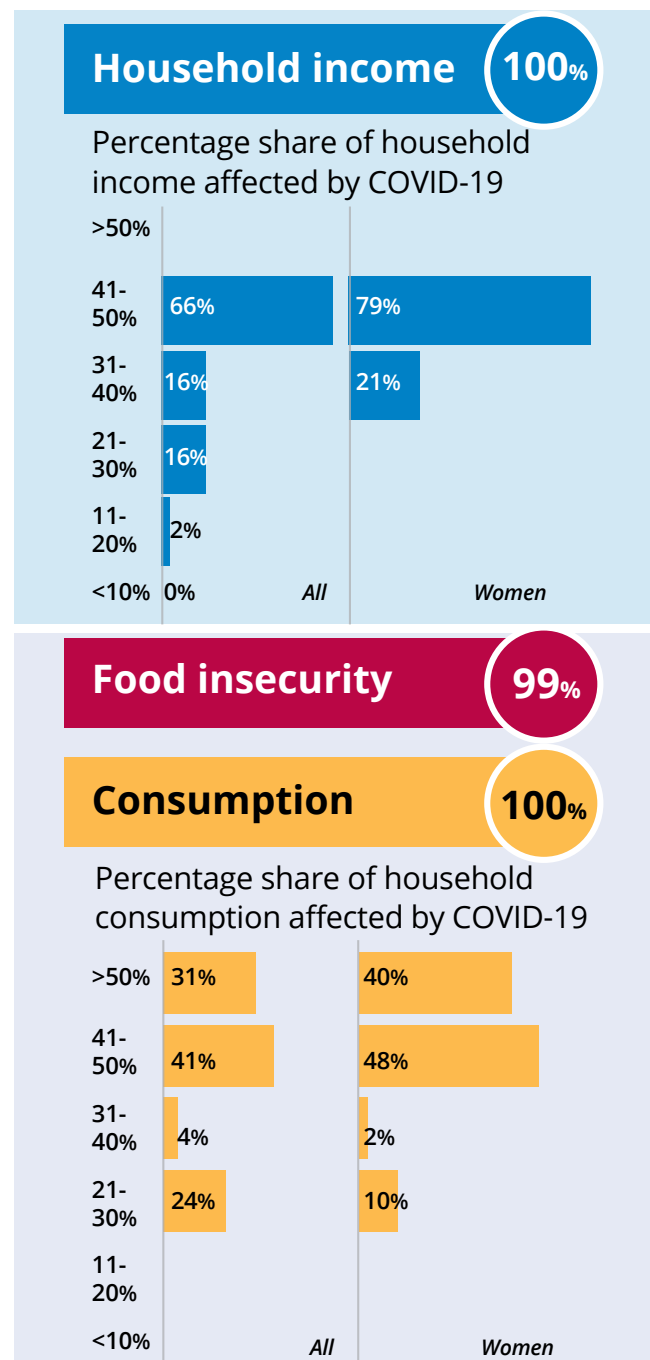


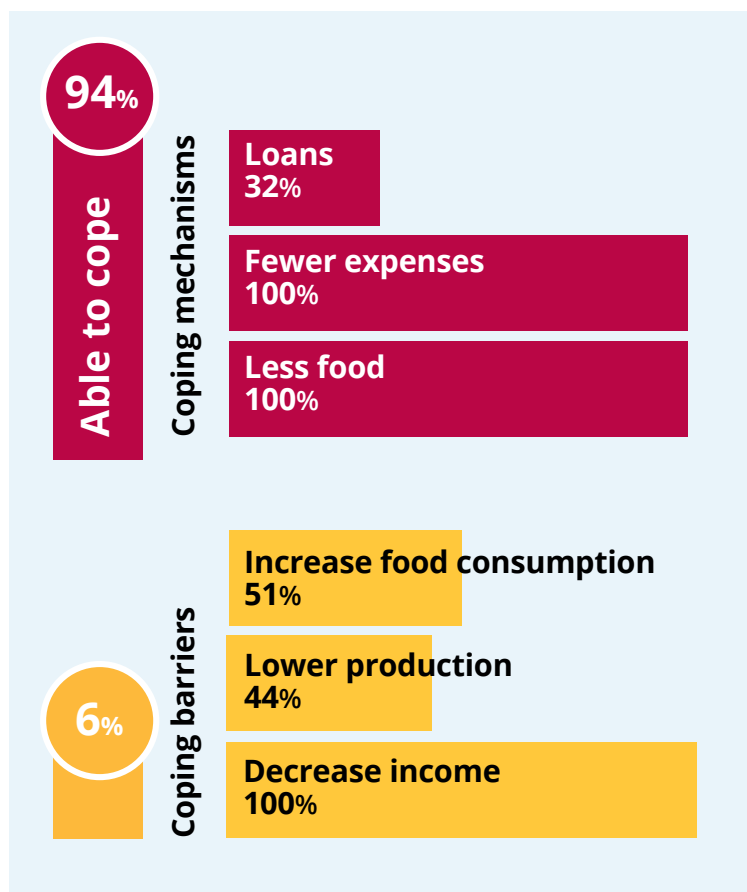
As incomes from farming have decreased, so did households' total monthly incomes for all surveyed farmers fall due to COVID-19. The majority of farmers report a percentage range of 41% to 50% as the dominant magnitude of affected household incomes. There are relatively more female farmers in this category, 79% of all surveyed female farmers. Numbers disaggregated by farming enterprise (predominantly crops, livestock or both) are similar to the relative distributions of all farmers (not shown here).

Alarming, nearly all farmers in our survey, 99% of 650 farmers, felt that due to changes in farm and other incomes, their food security would now be impacted negatively. These households thus self-report to no longer have a reliable access to sufficient quantities of (affordable and nutritious) food.

Nearly half of all women in our survey say that 41-50% of their household consumption was affected by COVID-19. Another 40% of female farmers consider the impact to be even worse, affecting more than half of their pre-COVID-19 household consumption levels.

All farmers experience a fall in household consumption. The bulk of them, 7 out of 10 farmers, at the highest two ranges put forward in the questionnaire.

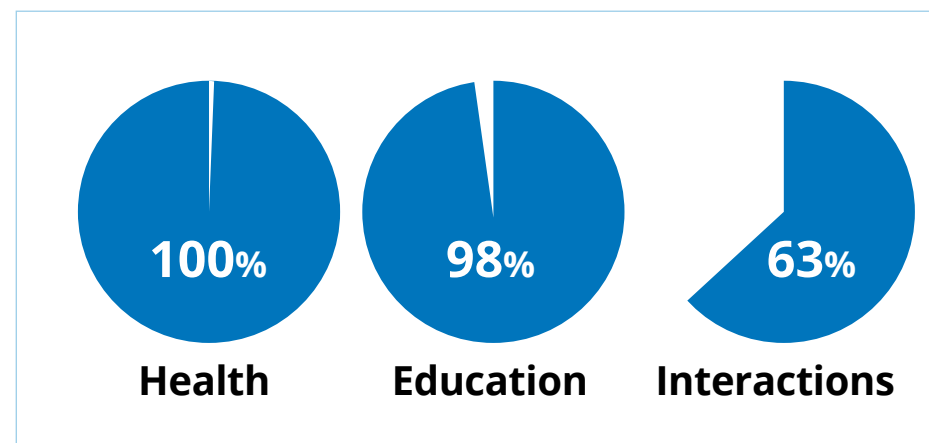




Next to significant changes in incomes and food security, surveyed farmers were also given the choice to indicate if other aspects of their life changed noticeable with the onset of the pandemic. All farmers agreed that health issues are now of a concern and almost all further expressed an unease about their children's education. The sudden limited ability for social interactions is also an issue.

Because of changes in both farm and on-farm wage employment, total household incomes fell to unsustainable levels. Whilst 94% of respondents said that they are able to overcome the effects of COVID-19, farmers attested coping mechanisms are concerning. All farmers say that they are eating less food, potentially skipping meals, and cutting down on their daily expenses of non-food goods and services. About a third of farmers further consider borrowing money.

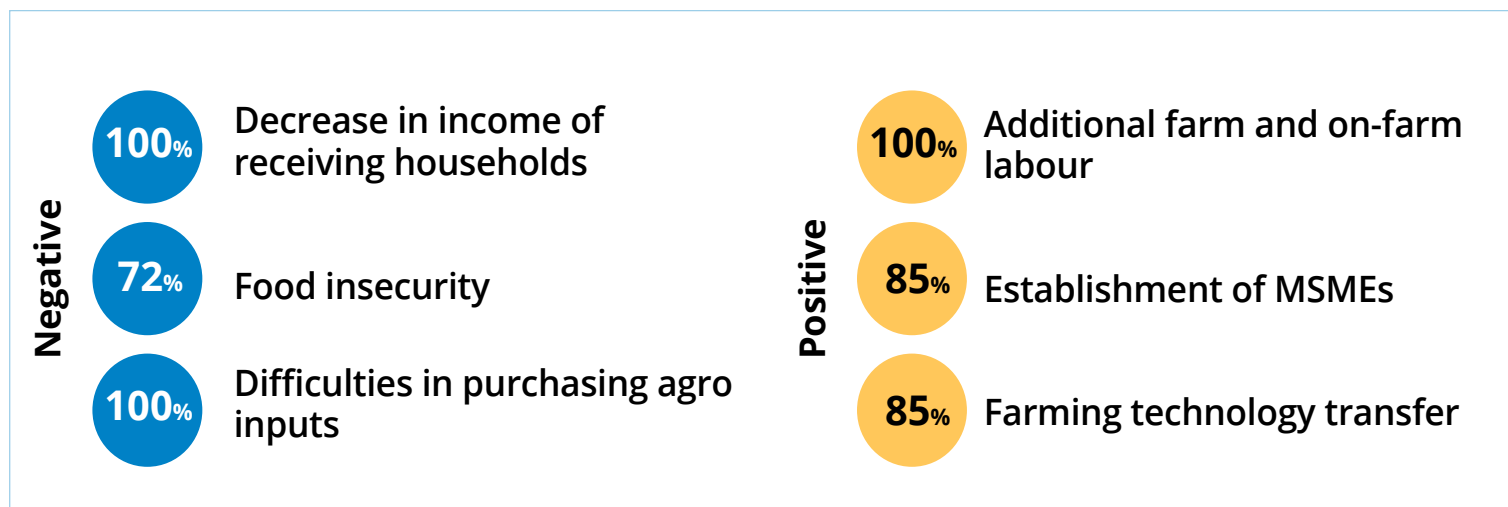
Of those farmers who said that they are not able to overcome the current situation (39 out of 650 farmers, 6%), all attribute this to reductions in their incomes. Other reasons stated by farmers are lower production levels and higher food consumption, maybe as children are out of school or returning family members are now accommodated.



The hundreds of thousands <sup>13</sup> of internal migrant workers, may or may not choose to return to their families once movement restrictions are further lifted and depending on their ability to find work opportunities in the post-COVID-19 economic environment. Note that registration of their return will be on the basis of state/region administrative units, not agro-ecological zones.

In line with public COVID-19 measures to prevent transmissions amongst the population, returning migrants need to stay in quarantine facilities for 21-days upon their arrival. Such facilities were made available in all locations where our respondents reside or from which they are accessible to them. At the facilities, migrants are generally provided with hygiene kits and food aid. Longer term economic support measures specifically for the migrant worker community are not yet in place.

Surveyed farmers have mixed expectations regarding the likely negative and positive impacts of returning migrant workers on their respective host communities:



There are valid concerns that incomes will decrease as remittances will no longer be available. With more family members now at home, food consumption levels rise (increasing food expenses). When larger shares of then potentially reduced total budgets are devoted to food expenses, there is less money available to farm households to purchase agro inputs. Whilst all respondents believe that migrant workers could increase the pool of farm labour, this might reduce the local rate of wages paid to all farm labourers. Many farmers state that migrant workers may be able to use their skills to establish small-scale businesses or improve farm technologies at their families' farms.

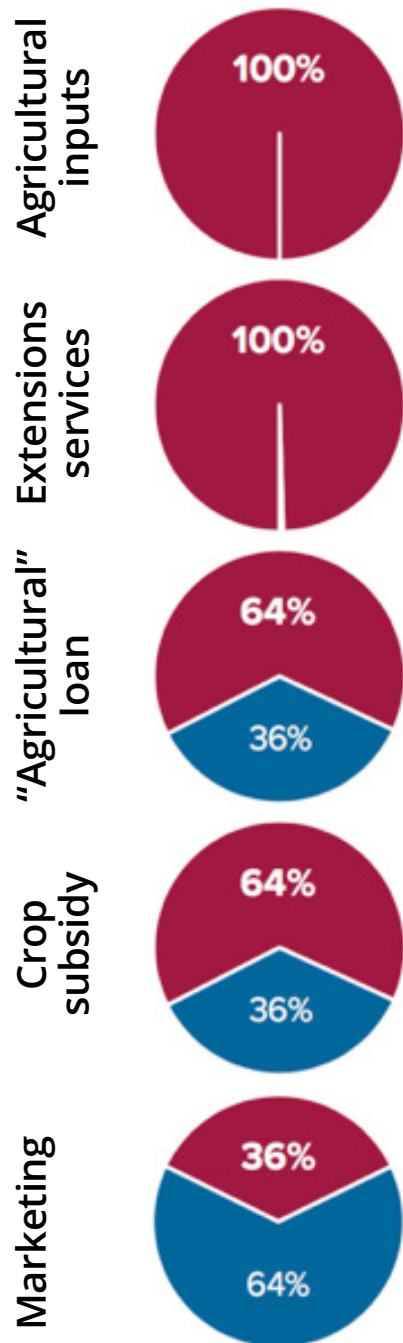
Almost all households in rural areas of the Dry Zone depend on agriculture (including livestock rearing and other activities such as beekeeping) for their livelihoods. Farmers would like migrant workers to be provided with support measures in home gardening, training on food processing and setting-up small-scale agro enterprises as well as access to extension services. This is indication of general needs of farming communities in the Dry Zone and other areas of Myanmar.

**Support around home gardening, 100%**

**Training on food processing, 84%**

**Training on MSMEs, 81%**

**Access to advisory services, 56%**



More than half of all of respondents (56% of the total 650 farmers) received support from public or non-public sources. When individuals received distributions, these were most commonly face masks and hand sanitisers (96% of all who received support). These hygiene kits were in 56% of the cases accompanied by information pamphlets or, in fewer cases (about 20%), by food and/or cash distributions.

According to those interviewed, the in-kind, food and/or cash distributions were allocated fairly across men and women (74% of total) or favoured women headed households (26%). The overwhelming majority of farmers (96% or 625 farmers) felt included in the discussions about what type of support measures or assistance would be most needed in their respective villages and to whom it should be distributed.

All Farmers stated their need for access to agricultural inputs like seeds, fertilisers and/or fodder depending on the specialisation of their agricultural enterprise. Nearly everyone further agreed that extension services with regards to production and yields would be beneficial to them. The ability to take out loans and profit from subsidies of crops would help alleviate the COVID-19 related restrictions, too. Public support in marketing is less demanded by surveyed farmers. Moreover, in reference to support needs of migrant workers, trainings in food processing and entrepreneurial skills are likely to be valuable for farm communities.



Smallholder farmers and landless households working in agriculture in the Dry Zone, the population surveyed also for this report, already live in challenging conditions. Indicative data presented in this report, point towards a magnification of the situation of farm households by COVID-19 and the public health measures to prevent its transmission amongst communities. The socio-economic situation of farmers and their families has deteriorated over the past months. Judging by national forecasts, Myanmar will record near stagnant or negative growth this year <sup>14</sup>. Without support from the government and its partners, the overall situation of farmers in the Dry Zone will likely continue to deteriorate in the near future as fragile economic systems appear to unravel, especially for agricultural crop farmers and women headed households.

Over a short period of time, markets became less accessible and prices at markets distorted. Without access to fields, agro inputs and extension services, production volumes and yields declined. Resultingly, farm incomes fell as did total household incomes now deprived of regular remittances and off-farm earnings <sup>15</sup>. At the same time, families are now in the situation of having to provide for returning migrants and school-aged children (schools reopened only at the end of July). Rural areas of the Dry Zone are characterised by agricultural activities and this is where economic support efforts are most needed to stabilise household incomes and food security. This will have a cushioning impact on the entire economy and help boost consumer demand.

Existing provisions focused on agricultural actors and the food system need to be accelerated with an integrated approach combining timely support on agriculture and livestock related inputs and extension services complemented by delivery through virtual, ICT enabled and bespoke mobile platforms and applications for ease of access, access to finance, agriculture value addition and strengthening of online trading and market and transportation linkages.

- 1 European Centre for Disease Prevention and Control (2020). Coronaviruses. [www.ecdc.europa.eu/en/covid-19/latest-evidence/coronaviruses](http://www.ecdc.europa.eu/en/covid-19/latest-evidence/coronaviruses), accessed July 29, 2020
- 2 World Health Organisation (2020). WHO Coronavirus Disease (COVID-19) Dashboard. <https://covid19.who.int>, accessed July 29, 2020
- 3 Moore et al. (2020). Identifying Future Disease Hot Spots – Infectious Disease Vulnerability Index. Santa Monica, USA: RAND Corporation
- 4 World Bank (June 2020). Global Economic Prospects. Washington, DC, USA: International Bank for Reconstruction and Development / The World Bank; ADB (May 2020). ADB Briefs: An Updated Assessment of the Economic Impact of COVID-19. Manila, Philippines: Asian Development Bank; UNDP (May 2020). COVID-19 and Human Development – Assessing the Crisis, Envision the Recovery. New York, NY, USA: United Nations Development Programme
- 5 Map in the background of this page adapted from Central Statistical Organisation (CSO), UNDP and the World Bank (2019). Agro-zones and states/regions of Myanmar {Map 1, p. ii} in Myanmar Living Conditions Survey 2017: Poverty Report. Nay Pyi Taw and Yangon, Myanmar: Ministry of Planning and Finance, United Nations Development Programme and International Bank for Reconstruction and Development / The World Bank. Here the Dry Zone includes Magway, Nay Pyi Taw, Mandalay and Sagaing regions/states though the actual agro-ecological region is not defined by state/region administrative lines.
- 6 Figure derived from population shares per agro-ecological zone in CSO, UNDP and the World Bank (2019). Living Conditions Survey 2017: Poverty Report
- 7 Characterisations of the Dry Zone for this section of the report have been extracted from unpublished UNDP project documents (see also the United Nations World Food Programme sponsored review MIID (2018). Strategic Review of Food and Nutrition Security in Myanmar: In Support of Sustainable Development Goal (SDG) 2 – Roadmap to 2030. Nay Pyi Taw, Myanmar: Myanmar Institute for Integrated Development)
- 8 For this survey, 10 farm household per village were randomly selected from existing records. Villages to be surveyed were selected from all villages with farmers participating in the SEAD project across townships.

9 See, for example, Ministry of Health and Sports (MoHS, <https://mohs.gov.mm/Main/content/publication/2019-ncov>), World Health Organisation Myanmar (WHO, <https://www.who.int/myanmar/>) and Myanmar Information Management Unit (MIMU, <http://themimu.info/emergencies/coronavirus-disease-2019-covid-19>)

10 The mobile phone app is currently tested in the two project townships in the Dry Zone by UNDP and its partner Ooredoo with the aim of scaling it out to union scale. The mobile application intends to disseminate agro and livestock advisory along with location- specific weather forecasts, market information and area- relevant providers of inputs and services. Partner government bodies will eventually be responsible for the content and administration of the application

11 Office of the United Nations High Commissioner for Human Rights (2020, April 9). Myanmar must allow free flow of information and aid to protect right to health in COVID-19 crisis - UN Special Rapporteur Yanghee Lee. <https://www.ohchr.org/en/NewsEvents/Pages/DisplayNews.aspx?NewsID=25783&LangID=E>

12 Of the interviewed 650 farmers, 423 (65%) primarily farm agricultural crops, 119 (18%) identified themselves as livestock farmers, 99 farmers (15%) hold livestock and produce agricultural crops. In some cases, livestock and agricultural crop farmers also pursue other on-farm activities

13 For up-to-date numbers of migrant workers crossing borders see e.g. International Labour Organization (2020). COVID-19: Impact on migrant workers and country response Myanmar. Yangon, Myanmar: ILO Liaison Office in Myanmar; United Nations Office for the Coordination of Humanitarian Affairs (2020). Myanmar: COVID-19 Situation Report No. 5. Yangon, Myanmar: OCHA; IOM (2020). COVID-19 Response Situation Report 9. Yangon: International Organization for Migration. For census data see Central Statistical Organisation (CSO), UNDP and the World Bank (2019). Myanmar Living Conditions Survey 2017: Socio Economic Report. Nay Pyi Taw and Yangon, Myanmar: Ministry of Planning, Finance and Industry, United Nations Development Programme and International Bank for Reconstruction and Development / The World Bank

14 World Bank (June 2020). Global Economic Prospects

15 Off-farm contributions to total incomes were not considered in this report; yet early (unpublished) results from socio-economic COVID-19 impact assessments in other rural areas of Myanmar show a sharp decline in wages of casual labourers and a decimation of work opportunities



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