



## ► ILO Brief

November 2022

# Asia–Pacific Sectoral Labour Market Profile: Agriculture\*

### Key points

- The agriculture sector<sup>2</sup> is central to rural development, and deeply integrated with a range of issues related to sustainable development, including the challenges of poverty and food insecurity, climate change, conflict, water, energy, infrastructure and biodiversity, amongst others. Yet, those in the agriculture sector, and the rural economy in general, are often excluded from processes and discussions on national development planning.
- Around 30 per cent of the region's total employed population are engaged in agriculture, many as low-productivity smallholder farmers. As such, in search for better livelihoods, those in rural communities typically seek additional work in non-farm activities or migrate to urban areas. However, there is potential for agricultural productivity growth and improved conditions of work from different practices and adoption of new technologies.
- Employment in the agricultural sector is typically characterised by decent work deficits and poor working conditions. This includes high rates of informality, lack of occupational safety and health, lack or limited access to social protection, lack of collective organization and low incomes. In recognition of its inherent vulnerabilities, there are more than 30 international labour standards focused on the agriculture sector and/or rural development, covering working conditions, rights at work, social protection and social dialogue.
- A number of policy initiatives are underway in the agriculture sector at the national and international level with the aim to increase agricultural productivity and improve working conditions. In ASEAN, this includes, among others, the ASEAN Master Plan on Rural Development, the ASEAN Guidelines for Responsible Investment in Food, Agriculture and Forestry, and the ASEAN Framework Action Plan on Rural Development and Poverty Eradication, 2021–2025.

\* This brief is published as a companion piece to the ILO [Asia–Pacific Employment and Social Outlook 2022: Rethinking sectoral strategies for a human-centred future of work](#). It is a product of the ILO Regional Office for Asia and the Pacific. Other sectoral labour market profiles are also available on the same web page. This brief was prepared by Richard Horne with substantive contributions from Sara Elder, Christian Viegelahn, Elvis Beytullayev and Elisanda Estruch-Puertas.

<sup>2</sup> The agriculture, forestry and fishing sector corresponds to [International Standard Industrial Classification of All Economic Activities \(ISIC\) Revision 4](#) major group A and included divisions 01 (Crop and animal production, hunting and related service activities), 02 (Forestry and logging) and 03 (Fishing). The grouping is shortened to “agricultural sector” or “agriculture” in most of the analysis that follows.

## ► Overview

The promotion of decent work in rural areas is central to sustainable development and poverty alleviation. While agriculture, is a key sector of the rural economy, the latter encompasses a wider range of economic activities that include on-farm and off-farm activities. While a number of policies and investments focus directly on agriculture, often rural development investments focus as well on expanding non-farm employment activities and opportunities. Nonetheless, agriculture is still the mainstay for much of the population in the Asia-Pacific region.

This brief provides an overview of the characteristics of the agriculture sector in the Asia-Pacific region, with a focus on employment characteristics and sectoral governance. The first section looks at economic characteristics of the sector, followed by employment trends. The following section provides an overview of characteristics of employment in the sector before looking at sectoral governance factors. The brief concludes by considering the sector's outlook for the promotion of decent work.

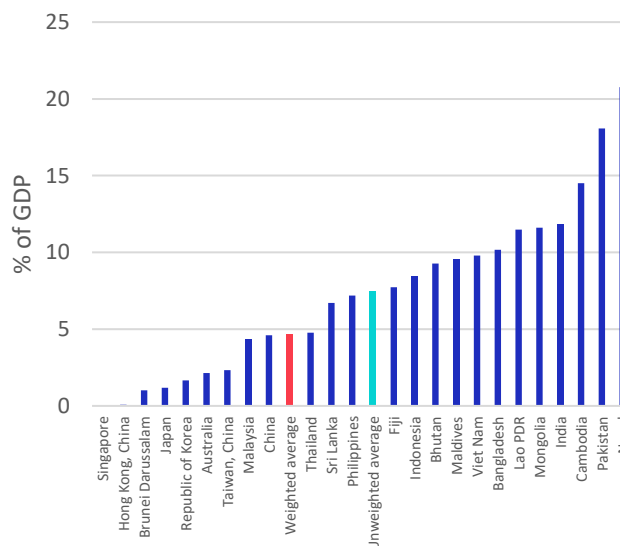
## ► Sectoral economic and employment trends

### Agriculture is the mainstay of livelihoods for many developing economies in the region.

On average, the agriculture sector accounted for just under 5 per cent of total gross domestic product (GDP) in the Asia-Pacific region in 2020 (figure 1). Given that agriculture employs 30 per cent of the region's total workforce (see next section), the relatively low value-added contribution of the sector reflects its low-productivity nature. It also relates closely to the level of development in the national economy, with less developed economies having the highest share of GDP in agriculture, such as Nepal (21 per cent), Pakistan (18 per cent) and Cambodia (14.5 per cent).<sup>3</sup>

The COVID-19 pandemic has had a significant impact on the agricultural sector through value chain disruptions. This was driven by a range of factors including transport disruptions impacting farm inputs, reductions in food processing capacity, trade and logistics disruptions and reduced food consumption in food services.<sup>4</sup>

► **Figure 1. Agriculture sector, share of GDP, available Asian countries and territories, 2020 (percentage)**



**Note:** The average of 24 countries in Asia-are shown with and without population weighting.

**Source:** Asian Development Bank, Multi-regional Input-Output (MRIO) Database.

<sup>3</sup> Data are not available for any Pacific countries.

<sup>4</sup> A Elbehri et al., *COVID-19 pandemic impacts on Asia and the Pacific – A regional review of socioeconomic, agrifood and nutrition impacts and policy responses* (FAO, 2022); ILO, *COVID-19 and the impact on agriculture and food security*, 2020.

Disruptions in agricultural value chains heightened attention on the need to safeguard food security in the region. The Association of Southeast Asian Nations (ASEAN) Member States established regional trade priorities to facilitate food trade during and after the pandemic.

More recently, agriculture production is additionally disrupted by the increasing fertilizer prices triggered by the Ukraine war.<sup>5</sup> Rising inflation of input costs are pushing smallholders further into debt and exacerbating livelihood losses and hardships.

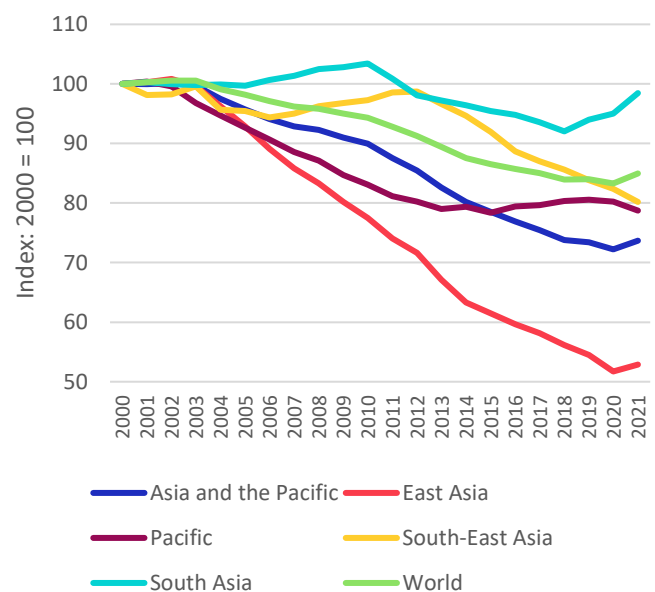
## Employment in agriculture has been on a long-term decline in the region.

In 2021, a total of 563 million people were employed in agriculture in the Asia-Pacific region. Total employment in agriculture has been on a long-term decline with the speed of decline decelerating during the past years (figure 2). Between 2000 and 2015, total employment in agriculture declined at an average pace of 1.6 per cent per annum in the region, equivalent to a reduction of 164 million people. The decline then decelerated to 1.1 per cent per annum between 2015-21, equivalent to a further 37 million people. This compares to a global average decline in agricultural employment of 0.3 per cent per annum between 2015-21. As observed in figure 2, the greatest relative decline by subregion was observed in East Asia, followed by the Pacific.

The COVID-19 pandemic had a range of impacts on employment in agriculture. In many countries of the region, national lockdown restrictions spurred an outflow of urban migration to rural areas, to family farms and villages.<sup>6</sup> This was particularly evident in countries of South Asia such as India, where there were reports of large numbers of the urban population migrating to rural areas.<sup>7</sup> This migration resulted in increased pressure on limited basic services and resources and competition for jobs in rural areas.

At the same time, there were also reports of labour shortages in the agricultural sector, which were only partially offset by the urban to rural migration flows.<sup>8</sup> Outflows of international migrants may have also contributed to labour shortages in the sector. This included seasonal workers in Australia and New Zealand, and migrant workers in some South-East Asia countries.

► **Figure 2. Total employment in agriculture, 2000-21 (index: 2000=100)**



Source: ILO modelled sectoral estimates, Nov. 2022.

As a share of total employment, agriculture accounted for 30 per cent of total employment in the Asia-Pacific region in 2021 (figure 3). This represents a decrease of 7.9 percentage points as a share of total employment, since 2011. The decline in the share in agricultural employment is consistent with industrialization in the region, and the shift away from agriculture to higher valued-added sectors, including manufacturing and services.<sup>9</sup>

The steepest declines as a share of total employment by subregion over the last two decades were observed in East Asia with a decline of 22.6 percentage points from 2011-21, followed by South-East Asia at 18.6 percentage points. The share of employment in agriculture is

<sup>5</sup> P. Nokaao, T. Nguyen and S. Phal Niseiy, "Mekong farmers struggle as fertilizer prices rise", Mekong Eye, 26 September 2022.

<sup>6</sup> The ASEAN, *Transforming ASEAN's Rural Landscape*, December 2021-January 2022.

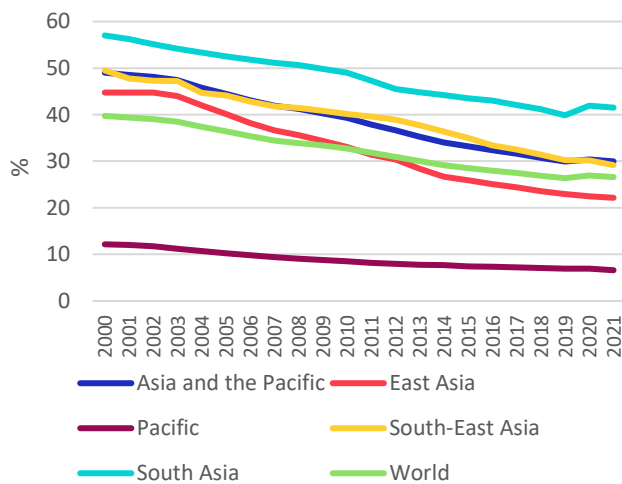
<sup>7</sup> A. R. Mishra, "Covid may have forced return of 51.6% urban men to villages: PLF survey", Business Standard, 24 October 2022.

<sup>8</sup> Elbehri et al., *COVID-19 pandemic impacts on Asia and the Pacific – A regional review of socioeconomic, agrifood and nutrition impacts and policy responses* (FAO, 2022).

<sup>9</sup> See ILO, *Asia-Pacific Employment and Social Outlook 2022: Rethinking sectoral strategies for a human-centred future of work*, 2022, section 3.5.

substantially lower in the Pacific compared to other subregions and has seen relatively little change over time. In South Asia there has also been a significant long-term decline, but the share in agricultural employment remains the highest of all the subregions at 41.5 per cent in 2021. Notably, there was an uptick in the agricultural employment share in South Asia in 2020, likely due to the surge in urban to rural migration that followed COVID-19 lockdowns.<sup>10</sup>

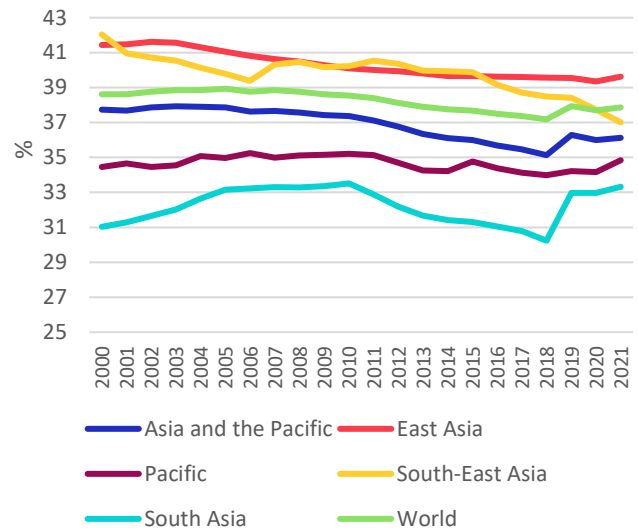
► **Figure 3. Share of agriculture in total employment, 2000–21 (per cent)**



Source: ILO modelled sectoral estimates, Nov. 2022.

There are significant gender inequalities in the agricultural sector, including in terms of access to agricultural assets, education and markets.<sup>11</sup> Around 36.1 per cent of total employment engaged in agriculture were women in the Asia-Pacific region in 2021 (figure 4). This has only marginally changed over the last decade, decreasing 1 percentage point since 2011. The share of women in agriculture is lowest by subregion in South Asia at 33.3 per cent, while the highest share of women in total employment in agriculture was observed in East Asia at 39.6 per cent. Women’s competing roles as primary care providers, discrimination and cultural and social norms are drivers of lower female than male labour force participation, including in the agricultural sector.<sup>12</sup>

► **Figure 4. Share of women in total employment in agriculture, 2000–21 (per cent)**



Source: ILO modelled sectoral estimates, Nov. 2022.

The share of youth (aged 15–24) in total employment in the sector declined by 5.2 percentage points between 2011 and 2021, from 15.6 per cent to 10.4 per cent, in the Asia-Pacific region (figure 5). The lowest share of youth in total employment in agriculture was in East Asia at 8.8 per cent and the highest was in the Pacific at 19.7 per cent in 2021.

There are many challenges for youth in the agricultural sector that impede their contribution to the revitalization and transformation of the sector and rural economies. For instance, limited access to land and markets, lack of capital, farm technology and the draw of better and higher paid opportunities (albeit often equally precarious) in the non-farm sector, including in urban areas. However, engaging and training youth in agriculture is an important means of introducing modern and productivity-enhancing technologies as well as sustainable agriculture techniques.<sup>13</sup> Promoting the engagement of rural youth in policymaking processes is key to increase decent employment for youth in agriculture.

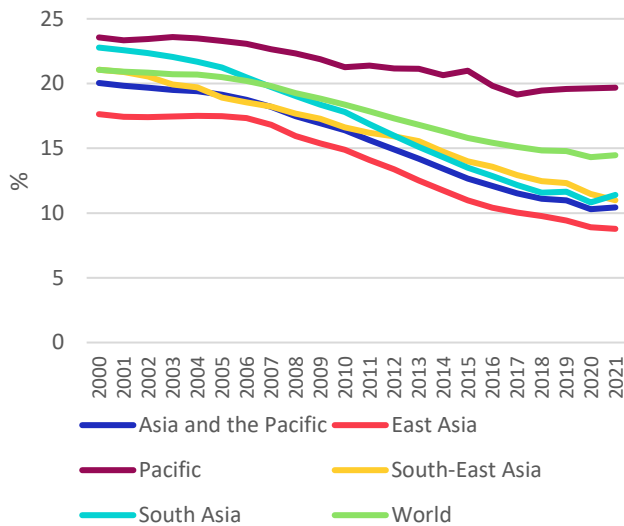
<sup>10</sup> M. Behera, S. Mishra and A. R. Behera, “The COVID-19-Led Reverse Migration on Labour Supply in Rural Economy: Challenges, Opportunities and Road Ahead in Odisha”, *The Indian Economic Journal*, Volume 69, Issue 3 (2021).

<sup>11</sup> ILO, “Rural Economy”, Decent work for sustainable development (DW4SD) Resource Platform, not dated.

<sup>12</sup> There are numerous publications discussing gender gaps in labour markets. See, for example, S. Dasgupta and S. Verick (eds.), *Transformation of women at work in Asia: An unfinished development agenda* (ILO, 2016).

<sup>13</sup> FAO, *Engaging ASEAN Youth on Responsible Agriculture Investments*, 2020.

► **Figure 5. Share of youth in total employment in agriculture, 2000-21 (per cent)**



Source: ILO modelled sectoral estimates, Nov. 2022.

## ► Employment characteristics in agriculture

### Employment in agriculture is associated with informality and poor working conditions.

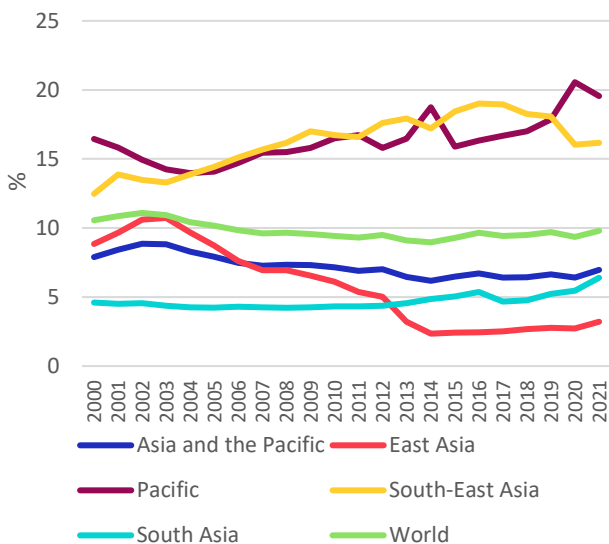
Employment in agriculture is typically associated with a lack of decent work in developing economies. In the assessment of four decent work indicators across 23 sectors applied in the ILO’s *Asia-Pacific Employment and Social Outlook 2022* report, the agricultural sector had the lowest results.<sup>14</sup> This is largely due to the low earnings, low skills composition, difficult conditions of work and the high risks associated to agricultural work, especially when land holdings are small. The majority of agricultural workers are in own-account work or unpaid family work. Only 7 per cent of total employment in the Asia-Pacific region was in wage and salaried employment in 2021, and this has increased by only 0.1 percentage points since 2011 (figure 6).

By subregion, the share of wage and salaried workers in agriculture was highest in the Pacific and South-East Asia at 20 per cent and 16 per cent, respectively. The lack of wage employment and the prevalence of informality and of seasonal and casual employment present significant challenges for the organization of workers in the sector. Without fixed employment relationships and formal reporting and registration, self-employed and casual labourers in agriculture have little means to participate in decision making processes that affect their work and lives. This is reflected in the very low union memberships rates among agricultural workers compared to other sectors. Among the few countries with available data, around 12 per cent of wage workers in ‘Crop and animal production, hunting and related service activities’ in Viet Nam reported being members of trade unions in 2018. The shares in Cambodia (2012) and India (2012) were less than 1 per cent and 40 per cent, respectively.<sup>15</sup>

<sup>14</sup> For the purpose of assessing what sectors of employment harbour better quality jobs, four indicators were analyzed: the share of workers in wage employment, the formal employment rate, the share of employment in high-skill occupations and the share of high-paid employees. See section 3.2 and figure 22 of ILO, *Asia-Pacific Employment and Social Outlook 2022*, op cit.

<sup>15</sup> Analysis of micro-datasets of national Labour Force Surveys.

► **Figure 6. Share of wage and salaried employment in total employment in agriculture, 2000–21 (per cent)**

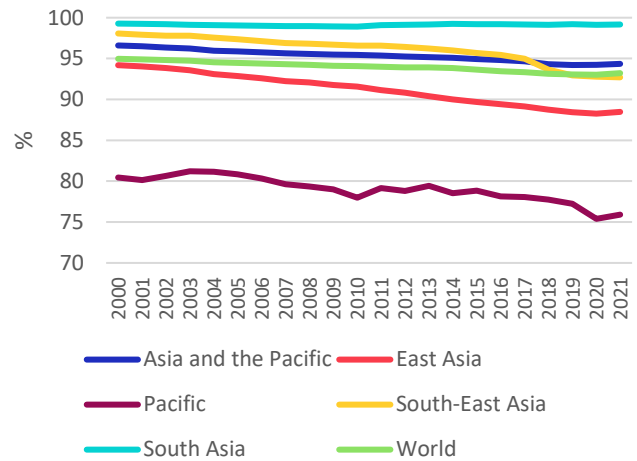


Source: ILO modelled sectoral estimates, Nov. 2022.

Informal employment is particularly prevalent in the Asia-Pacific region. More than 94 per cent of workers in the agricultural sector were in informal employment in 2021 (figure 7). By subregion, the informal employment share in the agricultural sector was highest in South Asia at 99 per cent, followed by South-East Asia, in which the share was estimated at around 93 per cent. The share was lowest in Pacific and East Asia at 76 per cent and 89 per cent, respectively. East Asia was the subregion in which the informal employment share within agriculture experienced the fastest decline over the past two decades, from 94 per cent in 2000.

The decrease in the aggregate informality rate in the agricultural sector in East Asia can be partially attributed to agricultural transformation strategies and slowing population growth.

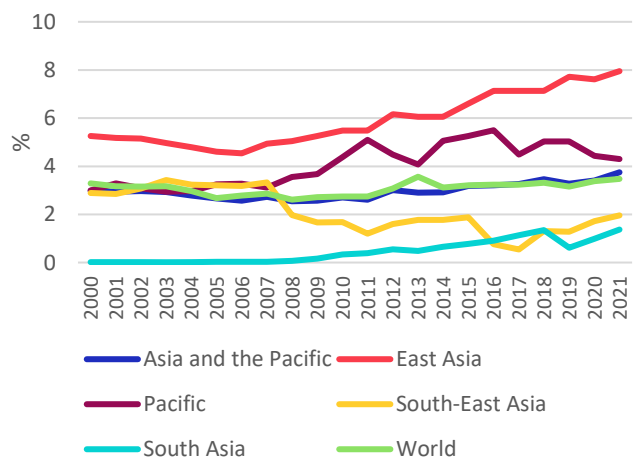
► **Figure 7. Informal employment share of total employment in agriculture, 2000–21 (per cent)**



Source: ILO modelled sectoral estimates, Nov. 2022.

The agricultural sector has a lack of high skilled workers. In 2021, only around 3.7 per cent of the region’s total employment in the sector were in occupations classified as high skilled (figure 8).<sup>16</sup> This has, however, been on the rise, with the most notably increases by subregion in South Asia and East Asia. Higher skills levels are necessary for raising productivity in the sector, including through the adoption of modern technologies and adoption of innovative techniques.<sup>17</sup>

► **Figure 8. Share of high-skilled workers in total employment in agriculture, 2000–21 (per cent)**



Source: ILO modelled sectoral estimates, Nov. 2022.

<sup>16</sup> The share of employment in high-skill occupations is defined as the share of workers classified in the following occupations: managers, professionals, or technicians and associate professionals, following the International Standard Classification of Occupations (ISCO-08).

<sup>17</sup> R. Rajalahti, *Agricultural Innovation in Developing East Asia: Productivity, Safety, and Sustainability* (Washington, DC: World Bank, 2021).

## ► Sectoral governance and promotion of decent work

### Agriculture is at the heart of sustainable development in the region.

Many of the Sustainable Development Goals (SDGs) will not be achieved unless action is taken to make decent work a reality for all those working in agriculture and rural economies, thus ensuring that no one is left behind.<sup>18</sup> SDG 2 (zero hunger) is the SDG most explicitly linked to the rural economy, but agriculture is also closely linked to a range of issues related to sustainable development, including poverty, food security, climate change, growth and decent work, conflict, water, energy, infrastructure and biodiversity, amongst others. For instance, the agriculture centre is the largest sector in terms of overall water consumption (SDG 6).<sup>19</sup>

The ILO pays particular attention to SDG 8 on decent work and economic growth, but acknowledges also SDG target 2.3 in its link to agricultural employment as a factor in pro-poor growth.<sup>20</sup> Amongst the priority areas for the ILO with regards to rural poverty is to ensure the participation of rural workers in policy and decision-making processes that affect their work and life through improved organization and the promotion of rights, standards and social dialogue.<sup>21</sup> Working in these areas is necessary to transform the rural economy and certainly to increase decent work opportunities within the agricultural sector.

The agricultural sector is characterized by a lack of collective voice and organization that applied to both workers' and employers' organizations. In a number of countries, increased organization has been achieved

through cooperatives and other social and solidarity organizations, thus facilitating some degree of social dialogue in the agricultural sector.<sup>22</sup> There are more than 30 international labour standards directly focusing on or of relevance to the agriculture sector or rural development, covering working conditions, rights at work and also social protection and social dialogue. The main challenge remains in the application and enforcement of such standards.

### Targeted skills development and investments to bolster greener and more sustainable practices

Agriculture depends on natural resources affected by climate change and agricultural practices have significant environmental impacts. For instance, the Intergovernmental Panel on Climate Change (IPCC) estimates that around 31 per cent of global greenhouse gas emissions are directly attributable to agriculture and land-use changes.<sup>23</sup> At the same time, many rural areas are particularly sensitive to climate variability and climate change, particularly threatening livelihoods for smallholder farmers. Some estimates suggested that anywhere between 10 and 50 per cent of South Asia's crops could be lost to global warming alone by 2100.<sup>24</sup> Accordingly, a number of initiatives and efforts are underway to encourage more sustainable agricultural practices. These include shifts to organic farming and

<sup>18</sup> ILO, *Advancing social justice and decent work in rural economies*, 2022.

<sup>19</sup> UN Department of Economic and Social Affairs (UNDESA), *World Social Report 2021: Reconsidering rural development*, 2021.

<sup>20</sup> SDG target 2.3: By 2030, double the agricultural productivity and incomes of small-scale food producers, in particular women, indigenous peoples, family farmers, pastoralists and fishers, including through secure and equal access to land, other productive resources and inputs, knowledge, financial services, markets and opportunities for value addition and non-farm employment.

<sup>21</sup> ILO, "Rural Economy", Decent work for sustainable development (DW4SD) Resource Platform, not dated.

<sup>22</sup> See ILO, "Social and Solidarity Economy", not dated, and in particular, ILO, *Mapping the Social and Solidarity Economy Landscape in Asia Towards an Enabling Policy Environment*, 2022.

<sup>23</sup> IPCC, "Summary for policymakers", in *Climate Change and Land: an IPCC special report on climate change, desertification, land degradation, sustainable land management, food security, and greenhouse gas fluxes in terrestrial ecosystems*, 2019.

<sup>24</sup> A. Mohan, "Climate Smart Agriculture in South Asia: Promoting sustainable and resilient agriculture intensification through regional cooperation" (blog), 6 January 2022.



conservation agriculture, as well as a range of initiatives to promote more sustainable use of natural resources.<sup>25</sup>

## ASEAN mechanisms for the promotion of rural development and agriculture

The ASEAN Master Plan on Rural Development is under development with support by multiple development partners, to provide a comprehensive guiding framework for rural development and poverty eradication. This is to be achieved in line with the ASEAN Community Vision 2025 and the 2030 Agenda on Sustainable Development.<sup>26</sup> In particular it seeks to build an efficient agriculture sector that meets a number of objectives, including food security needs, poverty alleviation and inclusion of vulnerable

groups.<sup>27</sup> The ASEAN Framework Action Plan on Rural Development and Poverty Eradication 2021-2025 has also been agreed upon, with ASEAN Member States agreeing to implement the plan, however, it is in its early stages.<sup>28</sup>

The ASEAN Guidelines for Responsible Investment in Food, Agriculture and Forestry is a voluntary set of guidelines influenced by the Committee on World Food Security's Principles for Responsible Investment in Agriculture and Food Systems to help ensure more responsible domestic and foreign direct investment.<sup>29</sup> The guidelines highlight key areas for responsible investment, including the recognition, voice and participation of vulnerable and marginalized groups, including smallholders, women and youth.

## ► Way forward and prospects for decent work

The agricultural sector is characterized by significant decent work deficits, including high rates of informality, low levels of security in employment status, lack of organization and voice, and poor working conditions including low levels of occupational safety and health.

Foremost in improving prospects for decent work in the agricultural sector and in the rural economic is to prioritize the effective implementation of the international labour standards designed to increase levels of protection and well-being among workers and producers. The many standards specific to the agriculture sector were designed, debated and adopted by trade unions and employers' organizations with ties to the sector and governments through the ILO standard-setting mechanism.<sup>30</sup> Beyond labour standards, oftentimes codes of conducts and guidelines for specific sectors are designed in tripartite settings for further promotion of decent work at the country level.

One of the major challenges of the sector is its contribution to climate change as well as vulnerability to it. Accordingly, efforts to address decent work deficits need to be developed hand in hand with efforts to promote greener and more sustainable agricultural practices. Facilitating transitions to more sustainable and resilient practices can help those in the agricultural sector improve productivity, while also contributing to reduced climate change impacts. For instance, the introduction of rice varieties that are more resilient to drought, or mixed crop-livestock to improve efficiency without over straining resources.<sup>31</sup> For this to be achieved, vulnerable and marginal groups need to have a greater voice in national development planning and investment planning.

Digital technologies also carry potential to improve livelihoods for those in agriculture, if promoted in an inclusive manner. For instance, smart phones provide increased access to markets and prices, helping farmers

<sup>25</sup> UNDESA, *World Social Report 2021: Reconsidering rural development*, 2021. For examples in Asia and the Pacific, see FAO, *Organic agriculture and small-scale farmers in Cambodia, Lao People's Democratic Republic and Myanmar*, 2018.

<sup>26</sup> AsiaDHRRA, "National Consultation on Rural Development Master Plan in Indonesia", 20 May 2022.

<sup>27</sup> ASEAN, *Transforming ASEAN's Rural Landscape*, December 2021-January 2022. The ASEAN Plus Three Cooperation Strategy on Food, Agriculture and Forestry (APTCS), 2016-2025, is another strategy that links to the realm of rural development, this time with eye to cooperation around food security.

<sup>28</sup> ASEAN, "Joint Statement of the Twelfth ASEAN Ministers Meeting on Rural Development and Poverty Eradication", 2021.

<sup>29</sup> ASEAN, *ASEAN Guidelines for Responsible Investment in Food, Agriculture and Forestry*, 2018.

<sup>30</sup> For more information, see ILO, "Introduction to International Labour Standards".

<sup>31</sup> ADB, *Just Transition Beyond the Energy Sector*, 2021.



obtain a better price for their products. It can also facilitate improved farm management, including for information and planning on harvesting, irrigation and spraying.<sup>32</sup> Digital uptake can be facilitated by improved investment in digital infrastructure in rural areas, such as the Shared Mobile Infrastructure Programme in India.<sup>33</sup> At the same time, skills development or training is to be targeted to population groups that lack the skills to handle digital technologies.

The Social and Solidarity Economy has potential also to improve livelihoods for those in agriculture. Social and Solidarity Economy organizations can help organize workers and facilitate sharing of information, including on farming practices and other areas of technical knowledge.

Cooperatives and other SSEs also bring financial support to agricultural enterprises and workers and organized the sharing of mechanized machinery and other technologies that would be too expensive for a single farmer or household to own.<sup>34</sup> Further, Social and Solidarity Economy organizations can help small-scale farmers increase access to markets, for instance, by promoting organic farming techniques and linking to international buyers. The Resolution concerning decent work and the social and solidarity economy, agreed at the 110<sup>th</sup> session of the international Labour Conference (June 2022), should result in more research and guidance on the role of the Social and Solidarity Economy and its relevance and scope for the agricultural sector.<sup>35</sup>

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<sup>32</sup> A. Guota, J. Ponticelli and A. Tesei, *Information, Technology Adoption and Productivity: The Role of Mobile Phones in Agriculture*, NBER Working Paper No. 27192, 2020.

<sup>33</sup> Ibid. See also: ILO, *Advancing social justice and decent work in rural economies*, 2022.

<sup>34</sup> B. R. Quiñones, *Social and solidarity economy in Asia: A South-South and triangular cooperation perspective* (ILO, 2015).

<sup>35</sup> ILO, *Resolution concerning decent work and the social and solidarity economy*, adopted at the International Labour Conference – 110th Session, 2022.

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