

OF AGRICULTURE AND THE RURAL SECTOR IN

INDONESIA

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Contents

ACKNC	owleagements	V
Acron	yms and abbreviations	vii
Execu	tive summary	ix
1. Inti	roduction	1
1.1	Background and rationale	2
1.2	FAO's engagement in Indonesia	2
1.3	Methodology	4
1.4	Organization of the report	4
2. Ind	onesia country context	5
2.1	National social and economic situation	6
2.2	Women's voice, decision-making power and political representation	10
3. Ins	titutional context, policy and legislation on gender equality and women's empowerment	13
3.1	Institutional context	14
3.2	Policies, strategies and legal frameworks	15
3.3	Programmes and plans	19
4. Ass	sessment of gender inequalities in agriculture and rural development	23
4.1	Agriculture and rural development	24
	Women and land	29
	Gender and food security	30
4.2	Gender and access to agricultural credit and cooperatives Gender in the marine and fisheries sector	31
		35
4.3		38
4.4	Women and climate change	40
Key	findings and recommendations	43
5.1	Findings	44
5.2	Recommendations	45
Biblio	graphy and references	48
Annex	res	
Anr	nex 1: Case study: women in seaweed farming and processing	57
Anr	nex 2: Vulnerability to food insecurity (2015)	62

Figures and tables

Figure 1:	Percentage of those over 15 who have passed different education levels in 2015	9
Table 1:	Key social and economic statistics for 2017	6
Table 2:	Male and female labour participation	7
Table 3:	Net enrolment rate by gender for 2015	9
Table 4:	Gender development index for 2015	10
Table 5:	Characteristics of poor and non-poor households in 2017	11
Table 6:	Representation of women and men in parliament for the period 2014–2019	11
Table 7:	Gender equality and rural women's empowerment in agriculture and rural developmentrelated policies, legislation and strategies	20
Table 8:	Gender equality/rural women's empowerment integration in agriculture and rural development-related plans and programmes	22
Table 9:	Rural-urban key statistics for 2017	25
Table 10:	Participation of women and men in agriculture, by sub-sector, in 2013	28
Table 11:	Recommendations for the Government of Indonesia and FAO	46
Table 12:	Seaweed production 2011–2015, East Sumba	58

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The Assessment was conducted under the overall supervision of Stephen Rudgard, FAO Representative Indonesia, the technical supervision of Clara Mi Young Park, Regional Gender Social and Rural Development Officer for Asia-Pacific, and the coordination of Ageng Herianto, Assistant FAO Representative Programme and Gender Focal Point, and Mohamad Reyza Ramadhan, Alternate Gender Focal Point, FAO Indonesia.

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Acronyms and abbreviations

ADB Asian Development Bank

AMAN Aliansi Masyarakat Adat Nusantara (Archipelago Indigenous Community Alliance (NGO))

ARD agriculture and rural development

BAPPENAS National Development Planning Agency

BPS Biro Pusat Statistik (Central Statistical Bureau)

BUMDes Badan Usaha Milik Desa (village-owned business institution)

CBO community-based organization

CEDAW Convention on Elimination All Form of Discrimination against Women

CGA Country Gender Assessment

CGIAR Consultative Group on International Agricultural Research

CPF Country Programming Framework

DPRD Province Parliament

EEZ exclusive economic zone
FGD focus group discussion
FHH female-headed household

FFS farmer field school
G20 Group of Twenty

GAP gender analysis pathway
GBS Gender Budget Statement
GDI Gender Development Index
GDP gross domestic product

GE gender equality

GEP Gender Equality Policy
GNI gross national income
Gol Government of Indonesia

IDR Indonesian Rupiah

ILO International Labour Organization

INFID International NGO Forum for Indonesian Development

JICA Japan International Cooperation Agency

KU Kredit Usaha Pedesaan (Low interest credit for rural economy)

LFPR labour force participation rate
MDGs Millennium Development Goals

MoA Ministry of Agriculture

MoWE-CP Ministry of Women's Empowerment and Child Protection

MoEF Ministry of Environment and Forestry

MoMAF Ministry of Marine Affairs and Fisheries

MSMEs micro, small and medium enterprises

NGO nongovernmental organization

PEKKA perempuan kepala keluarga (female-headed household)

PEKERTI Pengembangan Kerajinan Rakyat Indonesia

PERKASSA Family Women Healthy and Prosperous

PNPM Programme National Pemberdayaan Masyarakat (National Programme for Community

Empowerment)

PPP purchasing power parity

PPSW Pusat Pengembangan Sumberdaya Wanita (Centre for Women Resource Development (NGO)

RPJMN National Medium-Term Development Plan

RWE rural women's empowerment

Sakernas Survey Angkatan Kerja Nasional (National Survey on Labour Force)

SDGs Sustainable Development Goals

SMERU Social Monitoring and Early Response Unit

SMWC State Ministry for Women's Empowerment and Child Protection
SUSENAS Survey Sosial Ekonomi Nasional (Socio-Economy National Survey)

UNICEF United Nations Children's Fund

USD United States dollar

Executive summary

Agriculture, as a vital sector of the Indonesian economy, provides income for the majority of Indonesian households today. This sector is sustained by agricultural commodities such as rice, corn and soybeans; strategic plantation commodities such as oil palm, rubber and cocoa; and livestock commodities such as cattle, goats and poultry. The agricultural sector absorbed 35.9 percent of the total labour force in Indonesia and contributed 14.7 percent to the Indonesian GDP in 2012. Additionally, the agricultural sector serves as one of the key components of national efforts towards food self-sufficiency and poverty alleviation.

Women are involved in all activities in the agricultural sector, such as farming, animal husbandry and fisheries. However, despite serving as the backbone of one of the nation's most economically important sectors, women in agriculture are marginalized and often have little access to financial resources, knowledge and technology to improve their crop yields and improve their livelihoods. In rural communities of Indonesia, agricultural production activities are carried out by family units. Yet women often have no control over valuable resources and assets such as land, labour and new technologies.

The Indonesian National Medium-Term Development Plan 2015–2019 explicitly stipulated efforts towards equality in its principles. The main areas foreseen were women's access to higher education, health care and labour force opportunities, based on gender inequalities highlighted in the Human Development Index and Gender Development Index, such as gender gaps in education level and health status and low representation of women in main decision-making institutions. However, this Assessment found certain inadequacies in gender mainstreaming in main ministerial strategic planning documents for 2015–2019, where only collection of sex-disaggregated data was considered, with no further gender analysis undertaken.

The Presidential Instruction No. 9/2000 on Gender Mainstreaming provides the mandate for the Ministry of Women's Empowerment and Child Protection (MoWE-CP) to lead other ministries and agencies in developing policies and implementing gender

mainstreaming internally through the establishment of a gender mainstreaming taskforce. This taskforce is embedded in the Planning and Budgeting Bureau. The performance and achievement of gender mainstreaming of each institution will be measured annually using certain criteria.

At the sub-national, provincial and regency levels, offices of Women's Empowerment and Child Protection play similar roles for gender mainstreaming of other technical offices. In many cases the offices of Women's Empowerment and Child Protection lack human resources and capacity on gender issues. The fieldwork conducted during this Assessment also found this to be the case in East Sumba, where one of the value chain interventions of FAO has taken place.

Indonesia's rural development is still lagging behind urban areas. This exacerbates urbanization and increased outmigration of workers abroad. Rural Indonesia is facing several challenges. According to official statistics for 2017, there is a high prevalence of poverty in rural areas; 12.85 percent of the poor live in isolation with limited access to transportation, especially in archipelago and border villages. Severe poverty adversely affects low-income rural men and women who work as subsistence, small-scale farmers and seasonal wage labourers in the agriculture, marine/fisheries, plantation and mining sectors. The latest Multidimensional Poverty Index (MPI) value for Indonesia was estimated at 0.029 in 2012. In the same year, 9.10 percent of population was vulnerable to multidimensional poverty and 1.24 percent of the population was suffering from severe multidimensional poverty.

Rural and indigenous women living in coastal, farming and forest-dependent communities are engaged in various agriculture, fisheries and forestry activities for their livelihoods in addition to their daily domestic responsibilities. Sometimes they have to take up the work typically done by men in agriculture, such as when massive rural-to-urban migration happens in an effort to secure better household livelihoods. The National Medium-Term Development Plan 2015–2019 noted that about 22.5 million households are engaged in agriculture, of which 20 percent are female-headed households (FHHs). In addition to migration, other

factors such as climate change and land conversion from forest to plantation cash crop commodities affect rural women in different ways, including intensifying their domestic workloads.

In order to bridge the gap between rural and urban areas, one of the 'Nawacita' pillars of the current Government of Indonesia (GoI) prioritizes periphery development, in which agriculture and rural development are vital. Under this pillar, the Gol developed several key policies to bridge the gap between urban and rural areas. These include the Village Law No. 6/2014 that explicitly describes the vital importance of women's empowerment and gender equality. There are a number of other laws, policies and programmes that aim to reduce rural poverty and maintain food security as well as increase Indonesian women's contributions to, and involvement in, the economic sector, increase women's access to income-generating activities to develop self-potential, and strengthen women's bargaining position in accessing economic resources. However, challenges remain in mainstreaming gender throughout plans and programmes related to the agriculture and rural development sector.

The following are the major recommendations, based on the findings of this Assessment, for the GoI and FAO at the policy (macro), institutional (mesa) and community/household (micro) levels:

For the Government of Indonesia:

Macro/policy level

- Create mechanisms and procedures for collection of sex-disaggregated data and the conducting of gender analysis in the agriculture and rural development sector;
- Expand gender mainstreaming in the main agriculture and rural development-related policies to ensure women's access to, and control over resources and assets;
- Develop a comprehensive policy on gender equality and women's empowerment for agriculture and rural development-related programmes; and

• Ensure gender-balanced participation in policy-making processes at the macro level.

Meso/institutional level

- Support national-level ministries to engage in capacity-building efforts on gender equality for sub-national level offices and deliver training courses on gender-related issues to university lecturers;
- Clearly highlight gender gap issues and define gender-responsive indicators to measure the agriculture and rural development programme outcomes;
- Enhance the role of sub-national village development offices so that they get actively engaged in the issues of women's empowerment and gender equality; and
- Accelerate a gender-responsive budgeting process at the regency level to ensure women's representation and participation in existing development planning mechanisms.

Micro/community/household level

- Promote an integrated family farming approach through extension training and rural advisory services and encourage both women's and men's participation;
- Provide affordable quality childcare facilities through existing community-based organizations at the village level to free up women's time and lighten their reproductive work burdens:
- Strengthen monitoring and evaluation of gender-responsive policy implementation, including through regular tracking of expenses on gender-responsive budgeting and auditing; and
- Promote credit facilities, using village-owned cooperatives or financial services (BUMDes), and make them accessible for women and men farmers.

For FAO:

Macro/policy level

- Advocate for integrating gender equality concerns more deeply into the Village Law No. 6/2014;
- Promote the importance of gender mainstreaming in climate policies, practices and research, including activities around climate finance, to ensure that projects help women and men reduce their vulnerability and adapt to the impacts of climate change; and
- Ensure that clearly defined gender targets of projects are fully understood by all stakeholders and partner organizations, and work to strengthen their sense of ownership on gender-related targets.

Meso/institutional level

- Provide gender-sensitive data and measurable indicators in programme design and strategies to bridge gender gaps;
- Develop handy materials on gender and agriculture and rural development, featuring smart practices, to be circulated among field-level teams and local partners;
- Promote gender mainstreaming throughout the agriculture and rural development sector by organizing and facilitating workshops for local stakeholders and partners at programme locations;

 Support the Gol in generating concrete proposals for institutional arrangements that enhance rural and indigenous women's inclusion in decision making and overall agricultural and rural development governance through highlighting good practices from FAO's global experiences.

Micro/community/household level

- Work through and with women's groups to increase their entrepreneurial, managerial and technical skills as well as raising their self-confidence and leadership capacities;
- Facilitate women's representation in community development planning dialogues and decision-making processes;
- Provide community members with more gender-sensitive training, such as creating demonstration plots, developing pro-women farmer field schools, and organizing farmer exchange visits;
- Organize training workshops on gender-sensitive indicators for monitoring and evaluation and assist in setting up community-based mechanisms to improve service delivery.



1.1 Background and rationale

The Food and Agriculture Organization of the United Nations (FAO) recognizes the importance of gender equality both as a human right with intrinsic value in itself and as a means for the achievement of its mandate to eradicate hunger and poverty worldwide.

The FAO Gender Equality Policy (GEP) identifies gender mainstreaming and women-targeted actions as a twofold strategy for the achievement of gender equality in the agricultural and rural sector. In this regard, the Policy lays out a number of minimum standards for gender mainstreaming. These include a requirement to undertake a Country Gender Assessment for the formulation of country programmes established between FAO and member country governments, articulated as Country Programming Frameworks (CPFs), and to carry out gender analysis at the identification and formulation stages of technical assistance projects. The absence of a gender assessment of the agricultural and rural sector at the country level hinders effective and substantial gender mainstreaming in technical projects and programmes. There is a general lack of baseline gender-related information on the sectors of competence of FAO.

In the Indonesian context, women have significant roles in agricultural production and rural development. They are primarily responsible for ensuring the food security of their families and communities, as well as for managing livestock. However, in general, women have less control over economic and productive resources, including land, capital, agricultural extension and training, and information technologies. The latest available data on distribution of agricultural holders by sex is from 2018, at which time women held an estimated 24.04 percent of agricultural land compared to men's share of 75.96 percent (BPS, 2019). This points to the need for more updated data and evidence on women's rights to economic resources and their access to, ownership of and control over land assets in Indonesia (in accordance with Sustainable Development Goal 5, target 5a). Women and men work hand-in-hand in the agricultural sector, but in many cases women are paid less than men. Rural women have longer work hours than men, when one takes into account both paid productive and unpaid reproductive domestic and care responsibilities. To better understand the current situation in Indonesia, a time-use survey is required to help illustrate the gender dimensions of poverty, including time poverty. Women undertake a disproportionate share of care and domestic work, which is one of the key reasons they have less time for paid work, participation in political and public life, leisure, learning and other activities. The vital roles and significant contributions of women within this sector are not sufficiently recognized and acknowledged. Moreover, gender issues within the agricultural and rural development sector are less highlighted than gender-based violence and gender issues in other sectors such as in education and health.

The objective of this Assessment is to analyse the agricultural and rural sector of Indonesia from a gender perspective at the macro (policy), meso (institutional) and micro (community and household) levels in order to identify gender inequalities in access to critical productive resources, assets, services and opportunities. Additionally, the Assessment identifies needs and constraints of both women and men in selected FAO areas of competence, as well as identifying priorities and gaps. This Assessment aims to be a tool for FAO Indonesia officers to better mainstream the perspective of gender and the empowerment of rural women in future projects and programmes in the country by providing background information and baseline data essential to understanding gender-related issues. Finally, the Assessment provides recommendations and guidance to the Government of Indonesia and FAO Indonesia to better integrate gender equality and rural women's empowerment in the revision of existing and preparation of new policies, strategies, plans, programmes and projects. It also helps to identify key national stakeholders and potential partners for the promotion of gender equality and rural women's empowerment at the national, regency and local levels.

1.2 FAO's engagement in Indonesia

The Country Programming Framework (CPF) for Indonesia 2016–2020 stipulated that the continued support of FAO to the Government of Indonesia is in line with the country's development priorities. The formulation of the Framework involved a review of the Nawacita (nine development priorities of the GoI), the National Medium-Term Development Plan for 2015–2019 (RPJMN in Bahasa Indonesia), the United Nations Partnership for Development Framework (UNPDF 2016–2020), the Sustainable Development

Goals (SDGs) and other relevant regional and national strategic plans for food, agriculture, forestry, fisheries, climate change and rural development.

Given still significant levels of rural poverty and malnutrition and rapid urbanization, Indonesia's challenge is to make agriculture, fisheries and forestry more profitable, while also ensuring that these sectors are more resilient to climate change. It has become increasingly difficult to keep the younger generation interested in farming, fishing and forestry. The latest data on the composition of the labour force in agriculture confirms that the number of farmers under 35 years old sharply declined from 25.8 percent of the total agricultural labour force in 1993 to 12.9 percent in 2013 (Susilowati, 2014).

It is FAO's ambition to work with key line ministries to demonstrate good practices through targeted interventions, which can then be scaled up through the government's own human and financial resources, while, at the policy level, helping to redirect investment to where it will have a more positive impact on improving food and nutrition security.

According to the CPF, FAO will contribute towards:

- sustainable intensification of crop production, with a focus on climate smart agricultural practices and improved management of forests and fisheries resources
- reduction of rural poverty through more inclusive food systems and value chain development, with a focus on the promotion of efficient and inclusive value chains for rural poverty alleviation
- improvement of the policy environment and strengthened partnerships in agriculture, fisheries and forestry for food security and nutrition

To achieve the above priorities, FAO works collaboratively with the Ministry of Agriculture and the Ministry of Marine Affairs and Fisheries, the Ministry of Environment and Forestry, the Ministry of Villages, Disadvantaged Regions, and Transmigration, as well as sub-national government-related institutions, national and local NGOs and groups of women and men farmers. For example, FAO implemented a project named Decent Work for Food Security and Sustainable Rural Development: Support to Selected Coastal Communities along the Seaweed Value Chain in East Sumba, which was supported by the Ministry of Villages, Disadvantaged Regions, and Transmigration. The project has contributed to alleviation of rural women's poverty and has supported their empowerment by providing technical training and technology for seaweed cultivation, harvesting and processing. FAO has also supported seaweed farming groups by building their capacity to access markets for their products (for detailed information, see Annex 1: Women in Seaweed Farming and Processing).

Furthermore, FAO is providing technical assistance to the Ministry of Environment and Forestry and to indigenous peoples in the rollout of the presidential commitment to allocate 12.7 million hectares of forest land to indigenous peoples and local communities by 2019. In collaboration with local indigenous organizations, an analysis of pre- and post-recognition of indigenous peoples' rights to customary forest land is being prepared and will be finalized in 2019.¹

The Government of Indonesia and FAO recognize gender-sensitive policies and programmes as being central to successful economic and social development and to improving farming households' welfare. The new CPF asserts that sex-disaggregated data collection along with gender analysis will give strength to food and agriculture development policies and their implementation. Therefore FAO will support the GoI in enabling effective evidence-based and gender-sensitive policy formulation and adopting gender-sensitive approaches to implementation.

¹ Quoted from a filled-in questionnaire available at: https://www.un.org/development/desa/indigenouspeoples/wp-content/uploads/sites/19/2018/12/2018-FAO-UNPFII-Questionnaire.pdf.

1.3 Methodology

This Assessment combines a desk review of secondary data from various reports and previous research with the collection of primary data from multiple stakeholders through a series of focus group discussions and interviews.

At the national level, in-depth interviews were conducted with representatives of the Ministry of Agriculture (Division of Food Security and Gender Mainstreaming Working Group), the Ministry of Marine Affairs and Fisheries (Division of Fish Consumption) and the Ministry of Women's Empowerment and Child Protection (Division of Gender Equality in Economic Development Sector). Focus group discussions and interviews were conducted with the national NGOs Sajogyo Institute and Konsorsium Pembaharuan Agraria (KPA) involved in gender and agrarian reform in Indonesia.

At the regency level, the Assessment team met with and interviewed the Office of Marine Affairs and Fisheries, the Office of Community and Village Empowerment, the Office of Trading (Division of Cooperatives), the Office of Women's Empowerment, the District Development and Planning Body (Bappeda), the Stimulant Institute (a local NGO that is engaged with the FAO programme in East Sumba), and PT ASTIL, a regency government-owned seaweed factory.

The Assessment also involved conducting field trips to an FAO programme intervention area, the Hadakami village of East Sumba district, where interviews and focus group discussions were conducted. Interviews included the village secretary and male and female seaweed producers and processors, while one focus group discussion was held with 20 men of one seaweed farmer group and another focus group discussion was held with a women's group of 14 farmers and seaweed processors.

1.4 Organization of the report

Following this introduction, the organization of the remainder of this report consists of the following:

Chapter 2: Country context covers factors relevant to human development and gender in Indonesia and provides data and information on human development and gender-related indices and indicators, gender inequality and women's representation in policymaking.

Chapter 3: Institutional context, policy and legislation on gender equality and women's empowerment covers the national and sub-national institutions and mechanisms responsible for efforts on gender mainstreaming and women's empowerment in the agriculture and rural sectors, as well as gender-related policies, strategies, programmes and plans in agriculture and rural development.

Chapter 4: Assessment of gender inequalities in agriculture covers gender gaps in Indonesian rural development and provides details on gender dynamics according to technical sector, including agriculture, marine and fisheries, and forestry.

Chapter 5: Key findings and recommendations

highlights the key issues related to gender inequality in the Indonesian rural context, ministerial efforts on gender mainstreaming and the gap between the national and sub-national levels in terms of effective integration of gender equality and rural women's empowerment, as well as highlighting the achievements of FAO's interventions. The Assessment provides recommendations at the macro, meso and micro levels for both the Government and FAO.



2.1 National social and economic situation

Indonesia is the largest archipelago in the world. According to Indonesia's Central Statistics Agency (BPS) and National Development Planning Agency (BAPPENAS), the total population in 2018 was expected to reach 265 million, with women making up 131.88 million of the total population (Katadata, 2018). A member of the G20, Indonesia is considered one of the world's major emerging economies and is classified as a newly industrialized country. However, as Table 1 shows, in 2017, 26.58 million people, or 10.12 percent of the total population, were categorized as poor.² The latest Multidimensional

Poverty Index (MPI) value for Indonesia was estimated to be 0.029 in 2012, though this estimate does not factor in nutrition as an indicator. In 2012, 9.10 percent of the population was vulnerable to multidimensional poverty, 1.24 percent of population was suffering from severe multidimensional poverty and 10.6 percent was living under the national poverty line (UNDP, 2018). By 2017, the percentage living under the national poverty line decreased to an estimated 10.12 percent, as Table 1 also indicates. Additionally, the employment rate was an estimated 94.5 percent, meaning that 5.5 percent of the population of productive age (over 15 years of age) was without a job.

Table 1: Key social and economic statistics for 2017

Population (2017)	261.89 million
Population growth rate	1.34 percent
Life expectancy	70.6 years
Adult literacy rate	95.9 percent
Labour force participation rate	66.7 percent
Employment rate	94.5 percent
Number of people living in poverty	26.58 million
Percentage of population living in poverty	10.12 percent
Gross domestic product (GDP)	1015.42 billion USD ³
Economic growth rate	5.07 percent
Human Development Index	70.81

Source: BPS Statistics of Indonesia 2018

² As of 2016, the national poverty line was set at IDR 9864.7, equivalent to USD 1.90 (2011 Purchasing Power Parity (PPP)). https://databank.worldbank.org/data/download/poverty/33EF03BB-9722-4AE2-ABC7-AA2972D68AFE/Archives-2018/Global_POVEQ_IDN.pdf (As retrieved on 12/29/2018). It should also be noted that, as of March 2018, BPS announced that the total number of people living below the poverty line dropped to 25.95 million. https://katadata.co.id/analisisdata/2018/07/28/realitas-di-balik-keberhasilan-menekan-angka-kemiskinan (As retrieved on 12/29/2018).

³ Trading Economics estimated that the GDP in Indonesia increased from USD 1 015.42 billion in 2017 to USD 1 042.17 billion in 2018. https://tradingeconomics.com/indonesia/gdp (As retrieved on 07/11/2019). Additionally, the estimated value of Indonesian rupiah as per 1 July 2019 was: 1 USD = 14 103.27 Indonesian Rupiahs (this applies throughout the document). https://tradingeconomics.com/indonesia/currency (As retrieved on 07/11/2019).

Table 2: Male and female labour force participation

	2016	2017
Total unemployment (% of total labour force)	5.61	5.50
Total labour force participation (% of total labour force)	66.34	66.67
Male participation in labour force (% of male labour force)	81.97	82.51
Female participation in labour force (% of female labour force)	50.77	50.89

Source: Badan Pusat Statistik (BPS)4

Table 2 shows that although the number of women in the labour force is increasing, the proportion is still smaller than that of men. The labour force participation rate (LFPR) of women is 50.89 percent, meaning only half the number of women aged 15 and older are employed in Indonesia, while men have a LFPR rate of 81.97 percent. According to Sakernas data from August 2016, the percentage of women employed was only 48 percent of total women, less than that of men at 77.29 percent. In 2016, the number of people aged over 15 years, as an indication of the potential workforce, was 94.37 million males and 94.72 million females (BPS, 2017).

It is assumed that the lower LFPR of women is partly due to the traditional division of labour, in which Indonesian women are more likely than men to take care of the household, especially after giving birth. Another factor is that they are more likely than men to work in the informal sector, where a significant number of them are unpaid workers. This is in line with study findings that Indonesian women have a 24 percent higher probability of working in the informal sector than men and constitute the majority of self-employed and unpaid family workers (World Bank, 2015; Abdullah, 1997).

Education is vital to provide a pathway for empowerment of women and girls. It is an important goal under the Agenda 2030 for Sustainable Development and also key to achieving other Sustainable Development Goals (SDGs), including gender equality. As Graph 1 illustrates, the higher the education level, the bigger the gap between females and males in terms of schooling received. One of the main reasons for girls to stop schooling earlier than male students is early marriage. In Indonesia, 13.6 percent of women aged 20-24 were married by the age of 18, according to the latest available data from 2013 (ADB and UN Women, 2018). Data on prevalence of adolescent marriage show that girls in rural areas are more likely to get married in their teens than those in urban areas (UNICEF. 2016). One contributing factor is poverty, prompting parents to transfer the responsibility of raising their daughter to a new family. In some cases, poverty also discourages girls from continuing their educations, as family heads prioritize the education of young male household members, who are expected to later assume the role of head of household and of main income earner (MoWECP, 2011; BPS, 2016).

Education is a key factor in the Human Development Index. Table 3 shows enrolment data from 2015. The enrolment rate for female students is higher than that for male students within the three education levels assessed (except for at the primary level, where the rate is almost the same); however, the rates are higher in urban areas than in rural areas. Access to education in urban areas is relatively easier than in rural areas. In urban areas, there are more schools for all education levels and better education infrastructure.

⁴ As quoted from Indonesia Investments, n.d., "Unemployment in Indonesia." Accessed 2 January, 2019. https://www.indonesia-investments.com/finance/macroeconomic-indicators/unemployment/item255



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27.87 (27.71)

26.85

20.93 (21.95)

21.77

20.93 (21.95)

21.77

Female

Male

Elementary

Junior secondary

Senior secondary

University

Figure 1: Percentage of those over 15 who have passed different education levels in 2015

Source: Thematic Gender Statistics, 2016, MoWE-CP and BPS

Table 3: Net enrolment rate by gender in 2015

	Ur	ban	Rural		
Level	Male	Female	Male	Female	
Primary	95.93	96.42	96.06	96.43	
Junior secondary	79.18	81.49	72.70	77.13	
Senior secondary	64.88	66.68	52.31	54.22	

Source: BPS, Satu Data Indonesia

Regarding health status, life expectancy of women in 2017 was 73.06 years, higher than that of men, at 69.16 years.⁵ It should be noted that these figures are national averages. However, a more in-depth look reveals a number of health problems facing women, such as the risk of death during childbirth due to high-risk pregnancy, with 305 maternal deaths per 100 000 live births, according to census information (Survei Penduduk Antar Sensus/SUPAS) from 2015. Infant mortality mostly occurs in rural areas where

health facilities are limited (Kementerian Kesehatan, 2017). Among the rural poor, there is almost no budget for family health, let alone for women's reproductive health. The largest family expenditure is for daily food needs. Additionally, mothers face nutritional deficiencies, especially during pregnancy, because of the low quality and quantity of food consumed. Larger portions of food of more nutritious quality are usually given to the (male) head of the family (Wardani, 2014).

 $^{^{5}\,\}mathrm{BPS}$ statistical data, bps.go.id, accessed 26 August, 2018.

Table 4: Gender Development Index for 2015

		НС)	Life expe		Expected of scho	-	Mean ye schoo		Estimate national (GNI) pe	income
G	DI	Valı	ıe	(Yea	rs)	(Yea	rs)	(Yea	rs)	(2011 F	PPP \$)
Value	Group	Female	Male	Female	Male	Female	Male	Female	Male	Female	Male
0.926	3	0.660	0.712	71.2	67.0	12.9	12.9	7.4	8.5	6 668	13 391

Source: 2016 HDR Report

According to the Human Development Report 2016, with a ranking of 113 out of 188 countries and territories, Indonesia is among the medium human development countries based on its Human Development Index (HDI) value of 0.689 for 2015. The 2015 HDI value shows a 30.5 percent increase over the 1990 HDI value, reflecting progress made in life expectancy at birth, mean years of schooling, expected years of schooling and gross national income (GNI) per capita during that period.

The HDI indicators increased for both men and women over the last six years, although more so for women. This implies a reduced gender gap and a better Gender Development Index (GDI) score. Table 4 shows that women have a longer life expectancy than men. But in the economic sector, women are still lagging behind men. As indicated by the GNI per capita, men earn twice as much as women.

National Socioeconomic Survey (SUSENAS) data from 2015 indicate gender gaps in several areas including: (1) women's participation in the labour market is only 49 percent, below the national average workforce participation rate of 65.4 percent; (2) the average length of women's education (8.1 years) is below the national average (8.4 years); (3) the percentage of illiterate women (4.39 percent) is higher than that of men (2.92 percent); (4) the unemployment rate for women aged 15 years and over (6.77 percent) is higher than that of men

(5.75 percent); and (5) the female-male wage gap reached 14.5 percent (BPS, 2017).

2.2 Women's voice, decision-making power and political representation

Women's representation in key decision-making positions is an important indicator of the status of gender equality in a given country. The current administration under President Joko Widodo puts strong emphasis on improving women's political status. Currently, 8 out of 34 Ministries are led by women, including key ministries such as Foreign Affairs, Finance, Health and State-Owned Enterprises, among others.⁶

As an affirmative policy, the Government of Indonesia issued Law No.10/2008 on General Election of the Members of National Parliament, Senate (Regional Representative Council) and Regional Parliament to promote women's participation in Parliament and political parties and women's representation in decision-making institutions. Later, Law No. 8/2012 stipulated that at least one in every three candidates of a political party must be a woman. The 2014 elections adopted this law, disqualifying political parties that did not meet the requirement from submitting a list in electoral districts where the quota was not met (Inter-Parliamentary Union, 2014). Though 37.3 percent of candidates were women, the share of women representatives did not

⁶ Before the recent resignation of Social Affairs Minister (CNN Indonesia, 2018), eight other ministries including the Ministry of Finance, Ministry of Marine Affairs and Fisheries, Ministry of Health, Ministry of Women's Empowerment and Child Protection, Ministry of State-Owned Enterprises, Coordinating Ministry for Human Development and Cultural Affairs, Ministry of Foreign Affairs, and Ministry of Environment and Forestry were headed by women (Shabrina, 2017).

Table 5: Characteristics of poor and non-poor households in 2017

Characteristics of households	Poor households	Non-poor households
Number of household members (people)	4.61 million	3.67 million
Households headed by women (%)	15.83	15.02
Average age of household head (years)	49.49	47.51
Mean years of schooling of household head (years)	5.94	8.47
Education level of household head (%)		
Not completed primary school	34.38	18.57
Primary school	35.29	25.92
Junior high school	18.36	20.09
Senior high school	10.90	25.77
University	1.07	9.65
Main source of income (%)		
Unemployment	12.69	11.90
Agriculture	28.93	27.19
Manufacturing	9.88	10.00
Other (social and personal services, construction, financing business, mining, etc.)	40.08	50.91

Source: BPS, 2018

Table 6: Representation of women and men in parliament for the period 2014–2019

	Total	Won	nen	Men	
Level	Number	Number	%	Number	%
Indonesian Parliament (DPR)	580	97	16.72	483	83.28
Regional Representatives (DPD)	132	34	25.76	98	74.24
Province Parliament (DPRD I)	2 114	335	15.85	1 779	84.15
Regency Parliament (DPRD II)	14 766	2 406	16.29	12 360	83.71

reach the minimum quota. However, the number of female candidates showed an increase of 2.6 percent compared to the previous election in 2009 (USAID, 2014). Table 6 illustrates the ratios of females and males among Indonesian parliamentary representatives at different levels (Republika, 2018).

Among the 33 provincial parliaments (DPRD), only one – North Sulawesi – has more than 30 percent seats held by women. Of the 45 seats, 14 (31 percent) are held by female members. This shows an increase from the previous period (2009–2014), in which the share of female representatives was 22.22 percent of the total.

For the period 2014–2019, out of 403 regency/city parliaments, 20 have more than 30 percent seats held by women. The Minahasa Regency Parliament has the most female parliamentarians at 42.86 percent (15 out of 35 seats). The next after that are the South Barito Regency Parliament (40 percent, or 10 of 25 seats) and Depok City Parliament (40 percent, or 20 of 50 seats). An increase can be seen in the number of regency/city parliaments with more than 30 percent of their members female when compared to data from 2009, when only 8 regency/city parliaments were classified as such (Republika, 2018).

However, women's political presence at the national and regency levels does not extend down to the village level. Women's representation is still low at the community level. In Indonesian society, women have traditionally been responsible for domestic activities and not designated as household heads able to represent their families in community dialogues. Women are less likely to be engaged

in the public sphere and/or in decision-making processes. As the domestic realm is not considered a priority, the interests of women are often not discussed or addressed directly. Most women are not the main decision-makers within the household either. Despite the fact that they do both productive and reproductive work, they lack access to and control over vital resources, such as land, technology and markets. Indonesian women's limited agency, especially at the community level, is partly due to their long working hours that prevent them from participating in social activities and public events as well as insufficient skills and lack of experience in sharing their ideas, aspirations and needs (Zulminarni et al., 2014).

To help women raise their voices in public life and the political arena, certain policy directions and strategies on gender mainstreaming were elaborated in the 2015–2019 National Medium-Term Development Plan (RPJMN) to improve (1) the quality of life and role of women in development; (2) the protection of women from violence and trafficking; (3) institutional capacity for gender mainstreaming and protection of women against violence (Ministry of National Development Planning, 2017). The current administration has strived to strengthen women's community leadership by adopting the most recent National Policy of Elimination of Violence against Women that aims to enhance women's community participation by offering safety and protection measures in public places. It has also committed to addressing gender-based violence through the implementation of the government's zero-tolerance policy for gender-based violence though a number of domestic laws.7

⁷ For example, see laws on Domestic Violence (2004), Victim Protection (2006), Anti-Trafficking (2007), and Protection of Women and Anti-Gender-Based Violence (2009).



3.1 Institutional context

In 2000, the Presidential Instruction No. 9/2000 on Gender Mainstreaming in National Development Plan was issued. Attached to the Instruction are the Guidelines for Implementation of Gender Mainstreaming, to which each ministry and agency must adhere.8 According to the Guidelines, gender mainstreaming aims "to incorporate gender concerns and perspectives into national development programmes at all steps of development, i.e. planning, organizing, implementation, and monitoring." Gender mainstreaming should be implemented through gender analysis and capacity building of government agencies at the central and regional levels. The Guidelines indicate that the Ministry of Women's Empowerment and Child Protection (MoWE-CP) has the role of providing technical assistance to other ministries and agencies and, as a state Ministry, has an obligation to report regularly to the president.

The MoWE-CP provides technical assistance in the implementation of gender mainstreaming in the form of guidance, training, consultation, information, coordination, advocacy and provision of materials and data. Together with specific technical ministries, including the Ministry of Agriculture, MoWE-CP also develops a wide variety of pilot projects on gender equality and women's empowerment for communities. It conducts annual assessments of the performance of gender mainstreaming with established indicators, providing the basis for awards given by the MoWE-CP in recognition and appreciation of provincial and district governments, as well as sector ministries that have implemented gender equality programmes through gender-sensitive planning and budgeting.

In 2008, the Ministry of Home Affairs issued Regulation No.15/2008 on Guidelines on Gender, providing guidance on governance, development and community services from a gender perspective. It is stipulated in the Regulation that all provinces and regencies or cities form Gender Mainstreaming Working Groups and that the regents/mayors submit a report on gender mainstreaming in various policies and programmes. Governors report to the Minister of Home Affairs and the Minister for Women's Empowerment and Child Protection.

In 2009, the Ministry of National Development/ National Development Planning Agency (BAPPENAS) issued Decree No. KEP.30/M.PPN/HK/03/2009, which stipulates the establishment of a steering committee and technical team for gender-responsive planning and budgeting. Also, the Ministry of Finance issued a policy piloting gender-responsive planning and budgeting in several ministries, namely the National Education Ministry, Ministry of Agriculture, Ministry of Health, Ministry of Public Works, State Ministry for Women's Empowerment and Child Protection (SMWC), and BAPPENAS. Selected pilot projects must clearly state the context of gender gaps along with strategies and activities to address the gaps and ensure budget allocation. To accelerate gender mainstreaming, a gender-responsive budget analysis tool, the Gender Budget Statement (GBS), was introduced within the Government of Indonesia in 2010. By 2014, more than 20 ministries submitted their GBS. Typically, government officials draw up the GBS of a ministry by selecting a number of activities and sub-activities considered especially important from a gender perspective, and describe them using a set format known as the gender-responsive budget sheet. Also in 2014, an instrument for monitoring GBS implementation was piloted in some provinces and districts to see if budgeted plans and programmes were actually implemented (Budlender, 2015).

Indonesia is also playing an active role in the global commitment to the 2030 Agenda on Sustainable Development and the SDGs, with particular emphasis on the principle of no one being left behind. This has been supported by Presidential Regulation No. 59/2007. The National Medium-Term Development Plan 2015–2019 provides comprehensive information on the state of gender equality and the steps forward for programmes to focus on:

- Improvement of the quality of life and roles of women in development programme implementation;
- Improvement of the protection of women from human trafficking crimes; and
- Improvement of the capacity of institutions involved in mainstreaming gender equality and institutions promoting women's protection against all forms of violence.

⁸ As reported by UN Women Watch, to facilitate gender mainstreaming in National Development Plans, certain measures have been taken, one of which is producing manuals for gender focal points in each institution (UN Women Watch, n.d.).

⁹ In 1999, the former Ministry of the Status and Role of Women (that was established two decades prior) developed into this new ministry with a broader mandate (UN Women Watch, n.d.).

In order to expand the coverage of gender mainstreaming implementation, branch offices of the MoWE-CP were established at the provincial and regency/city levels. The current system of decentralized governance enables local governments to have full authority to establish specific institutions for enhancing women's empowerment and child protection. However, effective implementation of gender mainstreaming at the sub-national level strongly depends on local governments' levels of commitment. Each MoWE-CP branch office facilitates gender-responsive planning and budgeting processes and establishment of gender focal points in other technical offices at local levels. However, as recognised by the MoWE-CP, there is a gap in human capacity and resources at the sub-national level. In many cases, these offices lack expertise in gender issues and analysis. However, while there are some provinces and districts that reinforce this institutional setup with adequate resources and authority, there are others where women's empowerment activities are combined with activities pertaining to other areas. At the regency level, there is little knowledge or awareness of the need for gender mainstreaming, including collection of sex-disaggregated data and conducting gender gap analysis. In many cases, gender mainstreaming is perceived as additional burdensome work. At the local level, even when gender mainstreaming is implemented, it is limited to one sector, such as health (e.g. if a family planning programme is introduced) or to the handling of cases of domestic violence. Findings of the field visit to FAO's project site in East Sumba conducted for this Assessment affirmed the same shortcomings. For detailed information, see Annex 1: Women in seaweed farming and processing.

3.2 Policies, strategies and legal frameworks

Since the Presidential Instruction on Gender Mainstreaming of 2000 requires all ministries, government agencies and local governments to implement gender mainstreaming in their respective programmes and policies, including through the establishment of a taskforce for gender mainstreaming, such a taskforce has been incorporated into the

planning bureau of each ministry and agency, and is responsible for gender mainstreaming implementation in planning and budgeting processes. The head of the planning bureau is also the head of the bureau's gender taskforce and is assisted by a technical team. The membership of the gender taskforce is officially established by ministerial decree. The taskforce consists of representatives of each division (directorate) of a given ministry. The taskforce works toward achievement of the gender mainstreaming indicators established by the Ministry of Women's Empowerment and Child Protection. There are seven gender mainstreaming indicators, namely institutional commitment, availability of formal policy, the women's empowerment unit (or badan), human resources and budget allocation, an updated sex-disaggregated data and information system, gender tools and analysis, and a strategy for community participation.

Gender equality has become a strong focus of the central government. In addition to being included in the National Medium-Term Development Plan, the central government has also committed to implementing the SDGs, with a strong emphasis on gender equality issues. The current government's strong political support for gender equality is reflected in the 9 pillars (Nawacita) set by the President as national development objectives. These pillars provide a wider space for community participation, both by women and men, in the development process.

One of the pillars clearly stipulates the aim to "develop Indonesia from the periphery by empowering sub-regions and rural areas." To do so, rural development is a vital priority. The ambition to accelerate rural people's prosperity is supported by the issuance of Law No. 6/2014 on Village Development (called the Village Law) and its implementation guidelines laid out in Government Regulation No. 43/2014, affecting approximately 74 754 villages.¹⁰ According to 2010 official population data, 50.21 perent of population lived in rural areas, comprising 57 perent of total labour force in the country. 11 The Law stipulates the amount of funds (dana desa) allocated for village development. It intends to bridge the gap between the centre and peripheries in structural and bureaucratic procedures. The Law also reflects the new

¹⁰ Based on Ministry of Home Affairs Regulation No 56/2015 on the Code and Data of Administrative Area, there are 83 184 subdistricts or villages (consisting of 74 754 desas and 8 430 kelurahans). A desa is headed by a head of village, who is elected by popular vote. A kelurahan has less autonomy than a desa and is headed by a civil servant that is directly responsible to a subdistrict head.

 $^{^{11}\,}Indonesian\,Central\,\,Bureau\,\,of\,\,Statistics\,\,<https://sp2010.bps.go.id/index.php/site/index>.$

perspective of the village as being more than just an administrative unit. The village is seen as a territory with its own particular governance setup, local institutions, people, land and other economic and social resources. This perspective has significant implications for both the government and communities. Above all, the Law explicitly acknowledges the role and position of women. Therefore, it creates political momentum for rural women's socio-economic empowerment and can serve as an entry point for fostering better gender relations in broader society.

In 2005, the president issued a decree on the "Revitalization of Agriculture, Fisheries and Forestry" and set it as the priority of the national development plan. The National Medium-Term Policy Framework for Indonesia's Agricultural Sector 2010–2014 (NMTPF) presents an Agricultural Development Strategy with three levels of priority strategies, of which the ultimate priority strategy is "revitalization of agricultural competitiveness in the national and international economy." Additionally, the priority core strategies are (1) ensuring food security, producer profitability, consumer safety and nutrition; (2) developing sustainable agriculture in the face of climate change; (3) facilitating decent and environmentally-protective employment; and (4) disaster preparedness. The strategy includes a gender perspective in one of its main priority areas, "Governance, Rural Organization Reform, and Women & Community Empowerment," aiming to increase the contribution of women as producers through provision of resources, training, appropriate tools and equipment (JICA, 2011). To reinforce the above-mentioned strategies, the Minister of Marine Affairs and Fisheries issued and circulated Law No. 681/MEN-KP/X/2013 regarding the implementation of gender mainstreaming in all marine and fisheries activities (Ariansyach, 2017).

The sections below describe a number of additional policies, strategies and legal frameworks regarding Indonesia's agriculture and rural development:

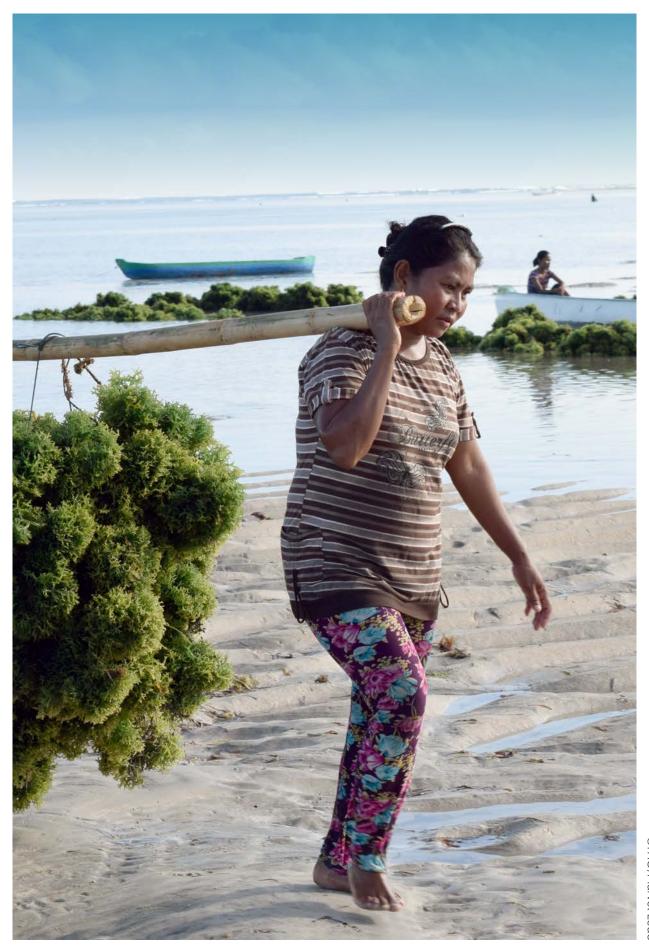
a. Encouraging maritime power
Indonesia is one of the top ten aquacultureproducing countries globally. The sector makes
a substantial contribution to the country's
development. This explains the significance of
the President's vision of building maritime power,
as strongly stipulated in his Nawacita. The main
strategies for developing maritime power are:
(1) rebuilding Indonesia's maritime culture;
(2) strengthening commitment to good

management of marine resources by establishing seafood sovereignty through the development of a fishing industry that prioritizes fishermen; (3) strengthening infrastructure for maritime connectivity by building sea tolls, harbours and other infrastructure and promoting the shipping industry and maritime tourism; (4) fostering maritime diplomacy that encourages all Indonesian partners to work together on the maritime sector; and (5) as a country at the fulcrum of two oceans, building a maritime defence force.

On a national scale, the development of marine and fisheries resource management is expected to be carried out in a manner that is both ecologically sustainable and prosperous for local communities. At the global level, in the face of climate change, ecoregion-based management and environmental conservation are becoming critical imperatives.

The roadmap of the Ministry of Marine Affairs and Fisheries identifies three pillars connected to its mandate of promoting maritime power: sovereignty, sustainability and prosperity. Within the prosperity pillar, the role of people in fisheries-related businesses is key. This is reflected in Law No. 7/2016 concerning the protection and empowerment of fishermen, fish cultivators and salt farmers. Article 45 of the Law specifies that empowerment activities should consider the role and involvement of women in fishing, fish farming and salt farming households. The Article affirms the state's obligation to increase the role and involvement of women in all business activities in the marine and fisheries sector down to the smallest scale, which is the family level. The Law is among the tangible evidence of the defence of the constitutional rights of fisherwomen. In order for the Law to provide benefits to women, maritime performance must be complemented by gender-responsive budget allocation. These concerns are in line with findings of recent case studies carried out by WorldFish and FAO (as part of the Consultative Group on International Agricultural Research [CGIAR] Programme on Fish Agri-Food Systems) that aquaculture-related development interventions should address the multiple factors linked to women's empowerment, such as technical skills, access to assets and network development (McDougall, 2018.).

It is noteworthy that women are engaged in a range of aquaculture value chain activities in Indonesia. In particular, women are predominant in aquaculture-related marketing and processing.



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On average, there are 1.7 times more women than men in processing and 1.5 times more in marketing (Sari et al., 2017). Despite women's important contributions to this sector, however, there is currently a lack of information regarding women's roles and, more fundamentally, the outcomes for women in this sector and factors that enable or constrain these. This represents a critical gap in the knowledge that is necessary for effective aquaculture programmes and policies. An FAO-led study entitled Women's Empowerment in Aquaculture: Two Case Studies from Indonesia began to address this gap in 2017. The case studies explored gender dynamics in homestead-based milkfish processing in the Sidoarjo District and household-scale shrimp farming in the Barru District. The findings of the study are relevant to the development of intervention strategies in aquaculture that will better contribute to women's empowerment.

b. Reaching food self-sufficiency and security
Within the Nawacita agenda, agricultural
development is characterized by a food security
approach. Food security is a fundamental
perspective on food and development that
includes a focus on the productive capacity of
farmers nationally vis-à-vis the food needs of the
population. Food security is strengthened through
the production, distribution and consumption of
local food products. The government is responsible
for ensuring that food security is a priority in the
national development agenda.

The Law No. 18/2012 on Food stipulates that "the rights of the state and nation to independently formulate food policy that ensures the right to food for people and guarantees the right of people to determine food systems suitable for the potential of local resources." In order to support the ambition of national food self-sufficiency, in 2015 the Minister of Agriculture developed a strategy to implement some fundamental changes (Masykur, n.d.).

So as to accelerate food security for strategic food crops such as paddy, corn, soybean and sugar, the government provides various assistance schemes and incentives for farmers, including facilities to acquire production tools and equipment, agricultural infrastructure improvement (e.g. irrigation and water management) and financial support for farmers willing to replace their plantation cash crops (such as rubber) with food crops. Sub-national governments at the regency level play a key role in improving value chains up through marketing mechanisms and

infrastructure-related development. This means huge land conversion from forest to economically strategic crops occurred with the aim of sustaining food self-sufficiency and food security. In the Dharmasraya regency, for instance, farmers, with support of facilities and government incentives, have demonstrated willingness to convert their rubber plantations into paddy fields, although they are unwilling to do the same with their oil palm plantations (Wardani, 2017b).

Given the recognition of the vital role of women in promoting food security, the government has various national strategies to enhance women's participation in the agricultural sector, supported with budget allocation for women's empowerment in food security-related programmes. This includes access to technical training and technology. Additionally, these strategies also consider the role of women in the decision-making processes around land conversion from food crops to cash crops that are happening in many forest-based village areas.

c. Development of social forestry

Sustainable forest management is vital for local poverty reduction and contributes substantially to national economic development. The involvement of local communities is a critical factor. Social forestry is recognized as a fundamental form of sustainable forest governance. At the ministerial level, social forestry is supported by the Ministry Regulation No. P.83/MENLHK/SETJEN/ KUM.1/10/2016 on Social Forestry. Currently there are about 25 863 forest-based villages, and 70 percent of them depend on forest resources for villagers' livelihoods. There are an additional 10.2 million poor people who depend on forest resources for their livelihoods, but lack the necessary legal status to ensure their access to such. Some cut down trees in forest areas to in order to cultivate even though they do not have legal ownership of the land. Hence, the current Government of Indonesia has allocated 12.7 million hectares for social forestry (MCA-Indonesia, 2017) supported with a budget of around IDR 15 684 529 586 (in thousand) or around 10.63 percent of total estimated budget allocation for forestry development until 2019 (Ministry of Environment and Forestry, 2015).

The social forestry programme is a cornerstone of the Government of Indonesia's policy on agrarian reform, which many consider essential to improving environmental and social outcomes. Some NGOs such as the Sajogyo Institute, Rimbawan Muda Indonesia and Sawit Watch Indonesia have played a prominent role in advocating for government action to address land conflict issues – which critically affect community rights and the rights of women – in ongoing agrarian reform efforts. Furthermore, in addition to promoting sustainable forest management, the social forestry programme is expected to strengthen women's access to forest natural resources, enhance women's experience, skills and knowledge on forest management and actively involve women in planning and implementing the proposed programme on social forestry.

d. Women's economic empowerment
In 2015, the MoWE-CP developed a programme priority of "three ends": ending violence against women and children, ending human trafficking, and ending injustice against women in their access to economic resources. Regarding the third, the MoWE-CP supports women's economic empowerment through the promotion of a home-based industry plan. The plan, supported by Ministerial Regulation No. 2/2016 on General Guidance of Home-Based Industry for Improving Family Welfare through Women's Empowerment, focuses on reducing unemployment, particularly of women that have limited access to economic opportunity outside the home. 13

Table 7 shares some highlights on rural women's empowerment (RWE) and gender equality (GE) from the above policies and strategies for agriculture and rural development (ARD).

3.3 Programmes and Plans

The Ministerial Strategic Plan 2015–2019 on gender equality and women's empowerment aims to improve women's quality of life and the roles of women in all sectors of development. It emphasizes the urgency of women's empowerment and gender mainstreaming in all government institutions, particularly at the sub-national level. Moreover, the plan highlights the vital imperative of developing links with universities and the business community to promote gender equality through building various capacities, including the capacity to provide sex-disaggregated data and to conduct gender analysis.

The MoWE-CP prioritizes gender mainstreaming in two main arenas: (1) in the economic arena, focusing on the areas of employment and microbusiness (home-based industry); and (2) in the social, political and legal arena, focusing on lowering maternal mortality rates and HIV/AIDS cases, climate change adaptation, the increased involvement of women in political decision-making processes within legislative, executive and judicial institutions, and mapping and review of gender-biased policies.

Other ministerial-level programmes related to rural women's empowerment in agriculture and rural development are as follows:

a. Women's Self-Reliance Village (Desa Prima) Programme – MoWE-CP (2004–2011) The Desa Prima or Desa Mandiri is a village participatory development model that aims to increase quality of life and reduce poverty through a reciprocal approach between better-off and less prosperous local communities. It aims to reduce the burden of poor families in terms of health and education expenses. The development model of Desa Prima is context-specific, based on local availability of natural resources and other economic resources and is implemented in line with local dynamics and based on collective consensus. The objectives of the model are to: (1) increase Indonesian women's contributions to and involvement in the economic sector; (2) support women in developing self-potential through broadening their access to income-generating activities; and (3) strengthen women's bargaining position in accessing economic resources.

The Programme's main criteria are level of poverty and marginalization of women and women-headed households. By 2011, which is when the national budget support for the programme ended, the Desa Prima model had reached 33 provinces, 104 regencies/cities, 113 sub-districts and 183 villages and was replicated by 4 provinces, 24 regencies, and 38 villages with regency budget allocation.

Sustainability of the Programme is very much dependent on local governments, particularly at the village level, to continually assist and to make the local facilitation support available. There are very few studies investigating the effectiveness of the programme for

 $^{^{12}}$ Home-based industry is micro-scale industry for the production of value-added products, done at home as full- or part-time work.

¹³ Press release No. B-060/Set/Rokum/MP 01/05/2018, published on 3 May 2018, accessed from <www.kemenpppa.go.id> on 1 September 2018.

Table 7: Gender equality and rural women's empowerment in agriculture and rural development-related policies, legislation and strategies

Policies, legislation and strategies	Highlights for rural women's empowerment and gender equality
Law No. 6/2014 on Village Development	Local development processes are more gender-balanced, since the Law explicitly stipulates the participation of women in all levels of development planning and implementation as being vital. Increase budget allocation for village development opens new opportunities for women's empowerment programmes.
	Measures are taken toward bridging the gap between rural and urban development, impacting both rural and urban women.
	Local communities, including women, are granted better access to development resources; the setting of development priorities is more participatory in terms of mechanisms and content.
	Better governance (including budget transparency) is fostered at the community level, including women's involvement in monitorinand evaluation of local development.
Law No. 18/2012 on Food	The Law opens up space and provides opportunities for local communities, including women, to participate in and derive benefits from food security programmes.
	The role of the local community, including women, is recognized i community-based food stock schemes.
	Recognition is given to the diversity of food sources based on local conditions and the diversity of local schemes and mechanisms based on local social values and practices. This includes consideration of women-managed mechanisms.
	The Law supports better mechanisms for fulfilling needs that fall under the responsibility of women, such as providing nutritious and varied foods for children.
	Better access to food assistance for marginalized groups (especiall poor and female-headed households) is promoted.
Ministry Regulation No. P.83/ MENLHK/SETJEN/KUM.1/10/2016 on Social Forestry	The Regulation opens up space and provides opportunities for women to participate in, and derive benefits from, social forestry. The Regulation facilitates mechanisms of mutual agreement of land use based on local context, enabling women's groups such as cooperatives to develop proposals for social forestry programmes. However, such proposals must pass through formal local (village) decision-making processes.
	Local communities, including women (and indigenous women), are granted better access to development resources on sustainable forest management.
Ministerial Regulation No. 2/2016 on General Guidance of Home-Based Industry for Improving Family Welfare through Women's Empowerment	The Regulation promotes strategies for women's empowerment through their engagement in economic activities. It helps marginalized groups of women to take advantage of and derive benefits from this regulation, based upon the economic sector and scale of business. The Regulation also explicitly lays out strategies for reducing local unemployment.

women's economic empowerment and the extent to which it has contributed to better, more gender-balanced relations in households and communities. A study in Serdang Bedagai showed that *Desa Prima* strengthened local institutions as well as strengthening women's and communities' empowerment, including through supporting women's access to training and other community development activities (Jamilah, 2016).

b. Food Self-Sufficient Village (Desa Mandiri Pangan) Programme – Ministry of Agriculture (2006–2015) Over 2006-2015, the Programme was implemented to secure food availability in areas facing food insecurity and/or food scarcity. The vision driving the Food Self-Sufficient Village Programme was for communities to have food and nutrition security through the development of systems facilitating food availability, distribution and consumption and sustainable use of local resources. Among the Programme's objectives were to sustain food availability and to reduce poverty. It has been reported that food shortage indicators showed a reduction in food shortage from 39.77 percent to 29.02 percent over the programme's duration, and that the number of toddlers under standard weight decreased from 2.35 percent to 1.03 percent and the number of households suffering from extreme poverty dropped from 57.49 percent to 42.24 percent (Darwis, 2014). The impacts of the Programme varied by area. For instance, the vulnerability reduction happened faster in households outside Java than in Java itself. As reported, as many as 825 villages reached self-sufficiency, including 250 villages in 2006, 254 villages in 2007 and 221 villages in 2008 (Darwis, 2014).

Nevertheless, the Programme was criticized for its insufficient training on institutional knowledge, financial issues, product marketing, and entrepreneurship and it was recommended that it provide cross-sector mentoring and financing. Sustainability of the Programme is also an issue, but might be ensured if poor households, organized into affinity groups, are empowered to benefit from their capital, savings, and revenue along with appropriate technology adoption related to productive family business development.¹⁴ Furthermore, a number

of case studies pointed to persistence of gender stereotypes within the Programme that hindered rural women's participation and inhibited them from benefiting equally to men in selected communities. For instance, the Programme was based on the assumption that some activities such as goat keeping or weaving are done only by men. But, in reality, there were women goat farmers and women weavers in pilot sites, and they were consequently denied access to resources and marginalized in decision-making processes. However, in general, the Programme provided opportunities for both women and men to generate income, including equal access to credit facilities (Sumarti, 2018).

c. The Strong Coastal Village Development Programme (Programme Desa Pesisir Tangguh) -Ministry of Marine Affairs and Fisheries (2012–2015) The Ministry of Marine Affairs and Fisheries attempted to strengthen the economies of coastal communities and their resilience to disaster through The Strong Coastal Village Development Programme. To address the main challenges facing coastal communities, including poverty, heavy damage to coastal resources, high dependence of community-based organizations upon support from outside, decline of local cultural values, poor village infrastructure and loss of environmental health, the Directorate General of Marine. Coastal and Small Islands initiated this innovative programme for the advancement of coastal villages.

In contrast to the *Desa Prima Programme* of the MoWE-CP, women played a minor role within this programme. In the general guidelines of coastal village development, women's involvement was mostly limited to their participation in village development plan meetings (*musrenbangdes*). In addition to women's groups, village leaders, representatives of community groups (CBOs and NGOs), representatives of the poor, and village community officials were invited to *musrenbangdes*.

The Programme is now managed by the Ministry of Village Development and is expected to use the budget that is allocated to each village under the Village Law. However, as other decentralized national programmes, the sustainability of *Programme Desa Pesisir Tangguh*

¹⁴ For more detailed information, see Rusastra, Supriyati and Saptana, 2008, p. 206; Rachman et al., 2010, p. 145; and Darwis, 2013, pp. 88–96.

will very much depend on local authorities' commitment and the pressure received from local communities to allocate the available budget to priority areas of the Programme.

Table 8 summarizes the relevance of the above agriculture and rural development programmes for gender equality and women's empowerment.

Table 8: Gender equality and rural women's empowerment in agriculture and rural development-related plans and programmes

Plan/programme title	Relevance for GE and RWE
Desa Prima (2004–2011)	This programme supported poor rural women in income-generating activities. Both individual women and groups of women were targeted in order to accommodate different needs and activities, as well as recognize existing activities of local women.
Desa Mandiri Pangan (2006–2015)	This programme (using a gender-neutral approach) did not explicitly mention women as its target but supported the whole community, including women's groups.
	The programme recognized the diversity of local food sources and food stock mechanisms and supported local communities, including women, in building upon existing resources and forms of social cohesion.
	Women benefitted from the programme through the availability of more nutritious foods for children.
	The poor, including women and female-headed households, were this programme's most targeted groups, especially during periods of scarcity.
Desa Pesisir Tangguh (2012–2015)	This programme (using a gender-neutral approach) did not explicitly mention women as its target group but supported the whole community, including women's groups.
	Women play vital roles mainly in post-harvesting and processing of fish products, not just in order to add economic value but also to preserve important food sources. Therefore, the programme provided technical training and tools to its target groups, including women in fish processing. This inclusion also brought about recognition of women in fisheries production and marine catchment.



4.1 Agriculture and rural development

Indonesia is a very diverse country, with different cultural norms and customary laws. About 45.34 percent of the population lives in rural areas, where agriculture is the main source of income (Global Business Guide, 2016). Main agricultural products include palm oil, palm kernel, rubber, cocoa, coffee, tea, tobacco, rice, sugarcane, maize, cassava, medicinal plants, tropical fruits, spices, poultry and seafood. Agriculture, value added (% of GDP) was estimated at of 13.95 as of 2016. This rate included forestry, hunting, and fishing, as well as cultivation of crops and livestock production (Index Mundi, 2016). Main cash crop products are exported to China, USA, Japan, India, Singapore, Malaysia, Pakistan, South Korea, Italy, the Netherlands, Bangladesh and Egypt (Global Business Guide, 2016). Among subsistence products, rice is the primary staple food crop. With steady increases in annual production, Indonesia is the third largest rice producer in the world. Despite a gradual increase in food crop production, the country remains a net importer of grains (mainly wheat) and other agricultural products, such as horticultural produce. The nation's total land area used for agricultural production has increased over the last decades and is now equivalent to 32 percent of the total land area. Although its share of GDP is decreasing, agriculture is still of crucial importance for Indonesia's economy, accounting for 14 percent of GDP. Moreover, the sector is the second biggest source of employment, in particular in the country's rural areas (Schenck, 2018).

About one third (31 percent) of the total population was employed in the agricultural sector in Indonesia in 2017, with women accounting for 37 percent of all workers in the sector, approximately 38.70 million people (ILO, 2017). According to World Bank data for 2018, employment in the agricultural sector constituted 30.21 percent of total employment, down by 13.80 percent since 2005. The decreased proportion of employment in the agricultural sector is believed to be a consequence of rapid urbanization in the country, with the percentage of population in urban areas growing from 14.5 percent in 1960 to 54.6 in 2017. The same data indicated that female employment in agriculture also dropped to 28.34 percent (World Bank, 2018a; World Bank, 2018b). In 2011, FAO reported that the share of rural female headed-households was 12.3 percent (Anríquez,

et al., 2011). FAO also reports that 93 percent of Indonesia's total number of farmers are on small family farms. They dominate the sector and grow the bulk of staples, including rice, corn and cassava, as well as of cash crops, of which palm oil and rubber are the main export crops (Schenck, 2018). The Strategic Plan of the Ministry of Agriculture for 2015–2019 highlights the significant contribution of agriculture to the national economy. Agriculture plays a crucial role in food production, environmental protection, landscape preservation, rural employment and food security in Indonesia. In addition to the strategic importance of food production, rural development is crucial for the vitality and wellbeing of rural communities comprised of women and men. The National Medium-Term Development Plan (2015–2019) aims to support smallholder farmers through extensive investment in infrastructure, extension and adaptation to environmental risks. The Government of Indonesia has significantly increased its investment in agriculture, mostly through subsidized inputs and credit. Total government support to agriculture reached 4.6 percent of GDP in 2016 (WFP, 2017).

There are, however, imbalances between the development of agriculture and of other sectors and between the development of urban and rural areas. In general, when the agriculture sector receives less attention than the manufacturing and service sectors, the resulting rural-urban disparity in development puts farmers in a weak position with less bargaining power (Wilonoyudho et al., 2017.). In fact, urban industrialization has the potential to create jobs and to attract rural migrants into urban areas. But such migration impacts those who stay behind in different ways. On one hand, migration may help families of migrants raise their standard of living through, for example, investments financed by remittances, but on the other hand, migration also risks isolating rural communities and causing them to remain among the poorest nationally. The latter is most prone to occur due to large-scale migration (Lucas, 2007). Table 9 compares the situations of urban and rural areas in the Indonesian context. As observed, the literacy rate for productive age groups is lower in rural areas. Consequently, there is a less trained/skilled labour force in rural communities, with few prospects for accessing higher quality jobs in sectors such as the service sector or in mechanized agriculture (Allen, 2016). The number of poor people is also higher in rural areas.

Table 9: Key rural-urban statistics for 2017

	Urban	Rural
Population	56.7%	43.3%
Literacy rate (among those over 15 years old)	97.57%	93.11%
Poor people	10.27 million	16.31 million
Percentage poor people	7.26%	13.47%
Poverty line (IDR/capita/month)	400 995	370 910
Poverty index	1.24	2.43
Poverty severity index	0.30	0.65

Source: BPS Statistics on Indonesia 2018

The availability of electricity and telecommunications infrastructure is also an issue in rural areas. Not all villages have electricity. In 2012, 76.9 percent of village households had electricity (Kementerian Desa, Pembangunan Daerah Tertinggal dan Transmigrasi, 2015). Related to telecommunication networks, both wire line connection and wireless telephone signal remain limited in many rural areas. Such limitations prevent village dwellers from having sufficient access to processing and markets and obstruct economic interaction between villages and cities.

Given the above data, the increasing pace of urbanization in Indonesia has widened the gap between rural and urban areas. As more development interventions are concentrated in urban areas and on more industrial sectors such as manufacturing. more rural people tend to migrate to industrial and urban areas seasonally or permanently. This is exacerbated by limited job opportunities in villages. Agriculture is no longer an attractive option for cash and other needs, especially for younger generations. It should be noted that young rural people are not homogenous. Therefore, gender as well as economic status affect internal and international migration patterns of Indonesian rural people. Some studies indicate that inequalities in landholdings are a major driver of migration for boys and young men, who leave their villages for work hoping that they will earn enough money to purchase land later. The boys from better-off families may get some land to cultivate

if their parents hand over ownership of part of their land to them. It has been observed that inheriting and owning land may not necessarily be enough to keep boys and young men in villages as farmers, as they have likely had the privilege of better education and so have better access to other livelihood options (Susilowati, 2014).

Trends in migration of rural girls and young women are different. Given women's limited access to land ownership, there are other factors that determine whether they take on farming as a job or not. In general, girls and young women help their parents on the farm until they get married and then work on the farm of their husband (or male relatives, if required) as well as taking care of their household after marriage. In line with prevalent gender norms, young women may accompany their migrant husbands to urban areas. There are surveys that indicate that more rural women migrate for family reasons than any other reason. This may partially explain why rural female migrants on average have lower educational attainment than rural men migrants (FAO, 2018). Furthermore, migration also affects the lives of rural girls and young women who are left in villages. A number of studies conducted at the global and national levels show that, in the absence of men, the situation of female farmers generally worsens because the agricultural work is passed on to migrants' female relatives within rural households (Saito et al., 1994). This is particularly found to be

the case when young men begin to migrate from "dry land region of secondary crops" (Susilowati, 2014: 4). The increase in the number of female-headed households might be due to this phenomenon in communities that are more prone to rural-urban migration. The PEKKA Foundation¹⁵ reported that the number of FHHs was 15 644 out of 89 960 households in the 111 villages in 19 districts and 35 sub-districts it surveyed in 2014 (Zulminarni et al., 2014). According to the World Bank, Indonesian female-headed households are more vulnerable to poverty, due to lower incomes, among other factors. It also reports that FHHs increased from 12.9 percent of total households in 2007 to 14.8 percent in 2012 (World Bank, 2018c). A survey conducted by the Social Monitoring and Early Response Unit (SMERU)¹⁶ in 2014 indicated that agriculture is the main source of employment for 50 percent of poor female heads of households (Zulminarni et al., 2014).

Migration from rural areas to foreign countries for work is a different matter. The rate of international migration by Indonesian women, most of whom come from poor rural regions and are hired as domestic workers in the Middle East and Malaysia, began to drop after the Government of Indonesia imposed a moratorium on domestic work in Saudi Arabia in 2011. In 2017, it was estimated that there were 9 million overseas migrant workers, almost 40 percent of whom were female domestic workers (Australian Government – Department of Foreign Affairs and Trade, 2018). Their two main motivations were to increase their households' incomes and their physical access to jobs (Australia Indonesia Partnership for Economic Governance, 2017). The fact that the underemployment rate for rural female low-skilled workers is as high as 52 percent (compared to 33 percent in urban areas in 2016) helps to explain why Indonesia's rural areas remain a prime source of low-skilled migrant workers (The World Bank Group, 2017).

A microstudy on socio-economic dynamics in two villages on the north coast of west Java revealed that the Indonesian economic crisis of 1997–1998 led to

high unemployment, which in turn contributed to significant changes in rural communities. Seasonal migrant workers returned home from urban areas, creating high pressure and competition over limited job opportunities in villages. Consequently, many of the men who had returned to rural areas began to seek any possible job, becoming agricultural labourers or engaging in informal jobs. During this period, women tended to earn a living by doing whatever work could be done at home, such as making snacks to sell in local markets. To escape poverty, migration became an option for generating income. The conditions were worse for landless farmers, whose female relatives had to go to work in Middle Eastern countries. According to the fieldwork findings, some of these women returned with enough earnings to buy a piece of land that their husband or male relatives began cultivating while also doing occasional work in nearby towns and cities on a seasonal basis (Breman and Wiradi, 2004).

Recent studies also point to a number of positive aspects of rural-urban migration in the Indonesia context, showing that it is a huge force for improving both rural welfare and farm productivity. According to the World Bank, Indonesia ranked 14th among the world's recipients of migrant remittances in 2015, with an estimated USD 10.5 billion sent from its workers living abroad, constituting about 1 percent of the country's GDP (FAO, 2017). However, with constant rural-urban migration, the fact that fewer people live in rural areas every year remains a concern of the Government of Indonesia and its national and international partners focused on the agricultural sector, especially when the levels of poverty in certain rural areas are taken into consideration.

Using data from the World Bank 2010 on Indonesia, Pengembangan Kerajinan Rakyat Indonesia (PEKERTI)¹⁷ highlights that 21.4 percent of Indonesia's population lives in absolute poverty as defined by the UN. They do not have access to at least two of the following poverty and hunger indicators: access to medical care during serious illness and pregnancy;

¹⁵ The Perempuan Kepala Keluarga (PEKKA) was established in 2004 to organize female-headed households into groups in order to support them more effectively. (For more information, see https://en.pekka.or.id)

¹⁶ The SMERU Research Institute was established as an independent research institute in January 2001. The Institute is managed by The SMERU Foundation, which was initiated by several staff members of the Social Monitoring and Early Response Unit, a project funded by AusAID, ASEM, and USAID and managed by The World Bank for several years until recently. (For more information, see https://www.smeru.or.id/en)

¹⁷ Indonesian People's Handicraft Foundation

access to clean and adequate shelter; access to education; access to communication; and safe drinking water. Access to quality water and water facilities in rural areas is also an issue from a gender perspective. According to UNICEF, one reason why girls miss school during their menstruation cycles, (which is the case for as many as many as one in seven), is due to poor water and sanitation facilities (UNICEF Indonesia, n.d.). Poverty in Indonesia is concentrated in rural areas; approximately 23.6 million Indonesians living below the poverty line are in rural areas, where agriculture and/or fishing are the main occupations. The majority work on their own smallholdings or on those of their neighbours (Pekerti, 2016). Further research indicates that 59 percent of Indonesia's poor are engaged in agriculture or fisheries, and 14.3 percent of rural people live below the poverty line, compared to 8.3 percent of people in urban areas. Rural women are more vulnerable to poverty as a result of gender inequalities in income distribution, access to credit, control over property and natural resources, and access to livelihoods (WFP, 2017). Poverty in rural areas is partly attributed to isolation and limited access to transportation, especially in archipelago and border villages. In addition, limited educational and health infrastructure in rural areas leads to poor development of human capacity.

In daily life in general, both men and women work together in agricultural production. In rural communities, agriculture is the foundation of livelihood activities and is usually performed in a family context. Indonesian rural women play multiple roles in agriculture, from planting and harvesting through to post-harvest activities. In rice production, although predominantly a male activity, women are involved in seeding, planting, fertilizing, weeding/ cleansing the grass and harvesting. Preparation of land is the only task usually done by men alone (Ekowati et al., 2009; Maimunah 2014). Several case studies show the involvement of women in managing farming, seed preparation (including seed selection and seeding), fertilization, harvesting and marketing. In some communities, women's time allocation to productive activities has been measured at 5.4 hours per day, while they still have to carry out domestic and care activities inside the home. Inequality in the allocation of working hours between rural men and

women is most apparent when daily farm work is completed; usually men tend to rest and chat with each other while women continue with domestic work such as cooking food and taking care of the elderly and children. In some rural communities, such as in west Java, field research revealed that women farmers play key roles in both domestic and productive work. Women spend around six hours per day on household work while men only spend around one hour daily contributing to house chores. Regarding productive work, women on average spend more time on it than half of men do.

Field observation of seaweed farming families in East Sumba found the same situation. Traditionally, women play key roles in domestic work and other unpaid work. Yet, along with doing their routine domestic and family care tasks, women are involved in almost all aspects of the seaweed farming process, including seed preparation, planting, harvesting, sun drying and collecting. Some are also engaged in seaweed processing for snacks for additional income generation (Hutajulu, 2015). For more detailed information, see Annex 1: Women in seaweed farming and processing.

Additionally, women play a primary role in intercropping activities such as planting long beans, yams, taro and some other vegetable crops. These foods are used for the daily needs of the family. Rural women are also responsible for maintaining their home vards, planting vegetables for family consumption and/or sale. Furthermore, women are often in charge of livestock activities, including cleaning enclosures, preparing feed and other aspects of animal care. Case studies conducted in East Lombok (Wardani, 2017a), Dharmasraya (Wardani, 2017b), and East Sumba¹⁸ revealed that women do not have control over large animals such as cows, buffalo and horses, but they do manage and have control over poultry like chicken and ducks. Overall, women play an important role in almost all subsectors of agriculture, as shown in Table 10.

In the food production subsector, women not only contribute to food security but also to biodiversity preservation. Since women farmers are responsible for food availability for the family, they have a wealth of experience in health and nutrition as well as in

¹⁸ Based on field observation and FGDs conducted with FAO programme beneficiaries in East Sumba on 20–21 December 2017.

Table 10: Breakdown of participation of women and men in agriculture by subsector in 2013

Subsector	Men (%)	Women (%)
Agriculture	77	23
Food crops	79	21
Horticulture	78	22
Plantation	83	17
Livestock	75	25
Fish culture	89	11
Fish catching	94	6
Forestry	86	14

Source: BPS, Agriculture Census 2013

diversity of locally accessible food sources. Moreover, women often experiment with breeding of indigenous species and so become experts in plant genetic resources. This traditional knowledge also contributes to food security (Karl, 1996).

Although women play a significant role in agricultural activities, their role is under-recognized due to social norms and traditional practices that limit women's participation in decision making both at the household and community levels. For instance, in Papuan culture, women have typically had a low status, despite the importance of their work towards household food security (Leong, 2017). Furthermore, women are less involved in determining crop types and planting schedules, purchasing and using fertilizers, and marketing the resulting products. Additionally, women's involvement in organizing events and/or forming farmers groups is still very rare (Hutajulu, 2015). It has been noted that women's work in agriculture and rural development is largely under-reported because women's economic contributions do not tend to be classified and/ or reported as "employment" per se, especially when they are contributing as family workers and undertaking unpaid agricultural work. Challenges persist in the collection of reliable data on rural women's work in agriculture because much of it is invisible or not counted in the System of National

Accounts. This is partly due to the seasonal and part-time nature of women's work balanced with unpaid care and domestic responsibilities. The majority of unremunerated family members are women and children. Despite the hard work of women in the agricultural sector, often they are considered to be merely helping their husbands (Arjani, 2008).

The advancement of gender equality in agriculture and rural areas faces some key challenges and obstacles. For example, the unequal participation of women and men in agriculture and rural development and the under-representation of women in farm ownership and agricultural decision-making processes create a gender gap in control over and access to economic and productive assets, such as agricultural land, technology, training and other opportunities. According to the Global Gender Gap Report for 2018, Indonesia ranks number 85 among 149 countries in performance on closing the gender gap, which is above the global average. Its ranking is higher under the subcategories of health and survival, educational attainment, and economic participation and opportunity, at 79, 107 and 96 respectively. In other words, Indonesia is managing to narrow its gender gaps and provide better access to economic opportunities and health and education services for women and girls,

especially for those from remote villages and farming families. However, women's contributions and roles in agriculture and related areas such as food security are not positively correlated with their economic situation. In general, women receive lower wages than men for similar work. As shown in the same report, the ratio of female to male wages is 0.72 (World Economic Forum, 2018). Several studies conducted over the last two decades affirm that rural women, including those working on their own land or as labourers on others' land, have limited control over and access to many key resources (Bachrein, 2000; Elizabeth, 2007).

The following sections provide a more detailed account of key issues regarding gender in a variety of key areas in agriculture and rural development in Indonesia.

Women and land

It is believed that land is closely related to women's prosperity; for instance, improved land tenure security leads to improvement of both women and children's situations (Agarwal, 1994). Secure land tenure and property rights play an integral role in empowering women in agriculture. Furthermore, they build women's self-confidence in taking part in decision-making processes within their households and communities. Under both cultural norms and customary and formal laws in Indonesia, both men and women have rights to land ownership and land inheritance, although they do not have equal rights. Traditionally, married women and men are expected to perform different but complementary roles. While men assume the role of the "head of household," women play the role of wives and mothers. Such gender conceptions were prominent in state ideology in the New Order period (1965–1998) and were embedded in government-designed rural development programmes, which continue to influence social norms and practices today (Siscawati, 2012). New Order development programmes emphasize households as the building blocks of the nation, with ownership of land largely folded into the household unit represented by the husband. Women's land rights are constrained by the traditional division of roles between men and women.

Indonesian women have less access than men to productive assets, including land, capital, agricultural extension and training, and information technologies. FAO reported in 2011 that women comprised an average of 40 percent of farmers and agricultural labourers in Indonesia. Under 20 percent of them own land, which is a critical resource for poverty reduction, food security and rural development. The Agrarian Law No. 5/1960 recognizes individual land ownership and that women and men have equal rights to land ownership in order to utilize and derive benefits from land for themselves and their families. Nevertheless, in practice, women have less ownership of land. For instance, in Java, around 65 percent of the land of married couples is registered under the husband's name (USAID, 2016). Although the law allows women to own land and to inherit it from parents, certain cultural and religious practices limit their rights and entitlements. For example, in Aceh, daughters are entitled to a lesser share of property than sons under provisions of Sharia Law (UNDP, 2017). The land owned by women through inheritance may go under the control of men as shared property when women enter into marriage. The Marriage Law of 1974 stipulates the joint ownership of property. However, there are few cases of registration with joint titling and married couples are often not informed about joint titling when they register (JICA, 2011; ADB and UN Women, 2018, p. 81).

In many areas in Indonesia, local informal leaders and decision makers have influence over how land is shared and distributed. For example, land redistribution and certification by a civil society organization in Banjaranyar Ciamis gave only a small portion to women thanks to the perception that women's efforts were not significant and that their roles were reduced to just being "supporters" of men (Ekowati, 2009). Another example is the case of the village of Sumber Urip in East Java, where 180 hectares of land were distributed to farmers, but only a small portion went to women, who were absent in the decision-making process (Dini, 2017). There is further evidence that local authorities and community figures influence land distribution, either through their involvement in land deals or in consequent land disputes. 19 In some cases, the

¹⁹ For more detailed information, see American Bar Association (2012) Access to Justice Assessment for Indonesia, p. 33. Available at: https://www.americanbar.org/content/dam/aba/directories/roli/indonesia/indonesia_access_to_justice_assessment_2012.pdf

relationship between community leadership and national and regional legal systems for managing resources is set through several steps. Communities that practice *adat*²⁰ must prove that they have well-functioning traditional institutions and a clear leadership hierarchy as well as recognizing the district government. Indigenous communities should also prove the existence of traditional communal territory (Van der Muur, 2018).

Indonesian women farmers continue to face many obstacles. Approximately 40 percent of small-scale farmers are women, amounting to 7.4 million women in 2013. Women play a role in almost all stages of production but they lack access to land, credit and technical support. In 2003, only one-third of certified land in Java was owned by women. Although the Marriage Act of 1974 regulates land ownership by wives, this is rarely reflected in certifications of ownership because of women's low levels of education together with the patriarchal mindset that a man's name should be on the certificate. In other words, Javanese women farmers are often not recognized as formal owners of the land on documents, although they have informal protection within Javanese culture. The Javanese language has a term for property ownership during marriage, gono-gini, and this concept is more influential in shaping family behaviour than official rules or even Islamic ideas. Furthermore, traditional arisan practices - a small-scale rotating savings association - serve as a source of informal credit for Javanese women farmers. This means that when women farmers are unable to access credit through land entitlements, traditional practices may support them. Furthermore, there are certain other matrilineal traditions that allow women to own and inherit property. West Sumatra's Balinese and Minangkabau cultures, for example, recognize women's rights to land ownership and to actively manage their own land (Azarbaijani-Moghaddam, 2014). This has been observed to give women an advantage in decision-making hierarchies. Conversely, the most vulnerable women farmers. most of whom live in the eastern parts of Indonesia such as Sulawesi, often suffer from lack of access to assets, including land, and can find it very hard to cope when there is a crop failure.

Unequal access to land also means unequal credit access, because land certificates are used for credit collateral. This has a major impact on the lives of

women farmers and their families. In many rural poor areas – in particular, parts of West Java, West Nusa Tenggara (NTB) and East Nusa Tenggara (NTT) - women farmers and their families owe large debts to middlemen due to limited access to credit. Debt is accrued not only for agricultural inputs, but also for basic needs and emergency health care. Many of these women are forced to become migrant workers abroad to pay their debts. It is thus clear that multiple problems are generated by women's limited access to land ownership and land inheritance. To further involve women in rural economic development, they should have better access to information, financial support, land and other resources. It is important for policymakers to consider the particular cultural backgrounds of women farmers from different regions to understand their unique situations and needs.

Gender and food security

There are still many food insecure areas in Indonesia. The Indonesian Food Insecurity Map (Annex 2) drawn up by the Food Security Agency and the World Food Programme in 2005 shows that of the 265 districts in Indonesia, 100 of them are food insecure. In rural areas of the country, to achieve household food security, women and men rely on products that can be used as family food or sold for income in the form of cash that can be used to meet a variety of needs, especially purchase of food. Such earning efforts can be made by some combination of working on one's farm, working outside of one's farm in other agricultural work and/or working outside the agricultural sector.

A number of studies note that, in food insecure areas, the allocation of women's time for activities in the family farming business only averages 1.63 hours daily or only 6.79 percent of the total hours in a day. Men, on the other hand, allocate an average of 5.65 hours, or 23.54 percent of their time daily, to managing the family farming business. These findings indicate that the direct management of family farming is still dominated by the husband, while the wife's role is indirect. In such scenarios, the wife usually plays a role in the preparations necessary for the husband's work in family farming (Taridala, Siregar and Hardinsyah, 2010; Sitepu, 2007; Hendratno, 2006). While women play a critical role in food production, processing and distribution, as

²⁰ Adat is customary law and traditional code of the indigenous peoples of Indonesia, governing all aspects of personal conduct from birth to death

mentioned above, they tend to have unequal access to, and control over, economic and productive resources. Unequal gender relations often leave women trapped in domestic and subsistenceoriented activities. At the household level, women and girls often become "shock absorbers" when food prices rise or other crisis strikes, reducing their own intake of nutritious food to provide for their other family members and spending more time and energy to secure and process food for domestic consumption. For instance, in Southern Central Timor, women are usually the last ones in the family to eat and they become malnourished during droughts (Leong, 2017). Unfortunately, data on prevalence of undernourishment disaggregated by sex and age is not currently available in Indonesia.

As in the agricultural sector, non-farm sectors in village areas do not provide sufficient opportunities for employment. This can be seen in the small allocation of time by both women and men to nonagricultural economic activities - only 0.74 hours per day in the case of women and 1.51 hours per day in the case of men. In areas with greater food security, the situation is somewhat better for women, with allocation of women's time in non-agricultural activities (including domestic activities and community work) at 1.48 hours (Setyawati, 2008). This is in contrast to their husbands, whose amount of time spent on non-agricultural activities is only 0.37 hours, or 1.54 percent of their time daily. This suggests greater employment and/or employment opportunities for women in food-resistant areas.

A 2012 study by the Indonesian Bureau of Statistics found that while women-headed households represented only 14 percent of the population, they consistently gave greater attention to food security and nutrition, with higher consumption of calories and protein than in households headed by men. This finding suggests that the Government's conditional cash transfers to women could help to improve diets, food security and nutrition by increasing women's purchasing power within the household (WFP, 2017).

As rural women are responsible for food processing and preparation at the household level, their skills are essential to increasing the quantity and quality of nutritious food, and ultimately to achieving higher levels of household food security. Additional contributions of rural women to food consumption and family health include gathering firewood for cooking, collecting water, taking care of children and caring for sick family members.

Gender and access to agricultural credit and cooperatives

Given traditional gender roles and division of responsibilities, women are not regarded as heads of households and are weakly represented in Indonesia's public sphere. This includes limited access to membership in agricultural cooperatives and as a result, limited access to their facilities. Women tend to have less access to information regarding cooperative services, including access to finance and credits. One agricultural development strategy is the strengthening of socio-economic institutions, including access to financial services from banks and non-bank facilities, strengthening rural financial institutions and providing loans for food security. The existence of Village Cooperatives (Koperasi Unit Desa, KUD) is vital for rural agricultural development. The Cooperative Law No. 17/2012 ensures the right of communities to form cooperatives. Nevertheless, the process is driven by the government and is still largely top-down. Village Cooperatives are well known in rural communities for the various services they provide, including granting of financial loans and provision of agricultural inputs and tools; some also play the role of a trader for farmers' products.

In recent years, Indonesian rural women have had increased opportunities to participate in farm and non-farm wage jobs (Widodo, 2009). Nevertheless, challenges remain in the wage gaps between male and female workers, as women are often seen as only complementary labourers. Consequently, women's access to activities in cooperatives and to agricultural technology is still limited, if they have access at all (Widodo, 2006). In terms of commercial credit, such as general rural credit (Kredit Usaha Pedesaan) at Bank Rakyat Indonesia, women's access is much lower than that of men. Among KUPEDES's debtors, women have been reported to be no more than 20 percent (Novitasari, 2006).

The sector of micro, small and medium enterprises (MSMEs) is rapidly developing in Indonesia. It is believed that MSMEs are better able to survive in times of economic crisis. It is also believed that the impressive contribution of MSMEs to Indonesia's GDP growth is attributed to the increased involvement of women both as business actors (entrepreneurs) and as workers. However, the problem of MSMEs managed by women is their limited business capital, as it is difficult for them to access bank credit. Additionally, because the level of education and skills of women is generally very low, many MSMEs run by women are economically stymied. So the

government needs to provide entrepreneurship and management training and soft loans to MSMEs managed by women in order for them to develop well. The role of women in the MSME sector is generally related to the trade and processing industries such as food stalls, small shops, food processing and handicrafts. It is perceived that such businesses can be done at home, and therefore are compatible with women's role as housewives. Although MSMEs are often initially approached as side jobs to help increase household incomes, when done seriously, they can grow to become a source of primary household income. Yet the main problem of insufficient capital for business development remains to be resolved. Most women managers of MSMEs have difficulties in accessing credit from banking institutions because formal financial institutions consider MSMEs unfit to receive credit and believe it is difficult for the MSME sector to develop. Another concern is that of bad credit, especially because rural women often lack physical property to use as collateral for loans (Priminingtyas, 2010).

Despite the challenges faced, MSMEs serve as the backbone of the informal sector in Indonesia, with the majority of women workers concentrated in this area. This sector absorbs most of the workforce in Indonesia, employing 80 to 96 percent of workers in more than 99 percent of all business units (Alatas, 2010). According to the MDG Report of the Gol, MSMEs contribute almost 58 percent of GDP. However, they only receive about half of bank credit. MSMEs account for 99 percent of all enterprises and employ 89 percent of the private sector's workforce. Indeed, the jobs provided through the growth of MSMEs in recent years are main drivers of reducing poverty and rising incomes (IFC/NORC, 2016). Distribution of business groups by size shows that micro and small enterprises comprise 98.33 percent of all businesses, i.e. the largest category, while medium and large enterprises comprise only 1.67 percent (Iryanti, 2017). Women run 39 percent of all microenterprises and small enterprises and 18 percent of medium and large enterprises (IFC/NORC, 2010).

The findings of a 2006 case study showed that 11.5 percent of total loans were distributed to women and 88.5 percent to men (World Bank, 2013b). Although legally there is no direct gender-based financial discrimination, in practice, women are less likely to seek loans than men, despite being perceived as

"lower risk" than male borrowers. The government seeks to encourage the development of MSMEs through the following steps: provision of facilities to increase the capacity of MSMEs; development of cooperatives by building capacity and entrepreneurship in business management; provision of information on services and business consultations; and expansion of the People's Business Credit Programme (MoWE-CP, 2011). The Ministry of Home Affairs Regulation No. 39/2010 encourages the formation of village cooperatives known as "BUMDes," a new form of village-owned cooperative that provides goods and services, including loans, to MSMEs. The Ministry of Finance Regulation No. 135/PMK.05/2008 provides a clear picture of government support to accelerate the real sector (i.e. the goods and services market) and to facilitate access to financing for MSMEs and cooperatives by establishing government-sponsored credit guarantee funds. Each of these programmes needs to be analysed further to see to what extent women, especially poorer women, can access services, and ways to target women entrepreneurs need to be developed.

Women's businesses are mostly smaller in scale and more informal. Sometimes women take a multi-role approach to managing their business, with managers doubling as workers. Although the government has issued the People's Business Credit KUR (Credit for Citizen Venture) programme to assist MSMEs, which is an unsecured soft loan for credit schemes of less than IDR 5 million, in reality the bank always asks for guarantees so that the MSMEs are motivated to complete their obligations. It is therefore difficult for the MSME sector to develop due to limited capital (Priminingtyas, 2010).

To enable women-run MSMEs to access credit for business development, the Ministry of Cooperatives and SMEs, in addition to developing a special project for gender development, has attempted to strengthen women's cooperatives through PERKASSA (Family Women Healthy and Prosperous) since 2006. PERKASSA is a programme of strengthening capital to the Savings and Loans Cooperative, Unit Savings and Loans Cooperative, Sharia Financial Services Cooperative and Shari'ah Financial Services Unit Cooperative. PERKASSA is designed to serve women who have a productive economic enterprise (Saefudin, 2008). As reported, a total of 200 cooperatives were assisted. One hundred cooperatives each received IDR 100 million through

the conventional banking system²¹ and another hundred received a total of IDR 20 billion through Shari'ah (Dipta, 2009).

There are several other models of credit provision and financial services for rural women run by sub-national government institutions and NGOs. In East Java, the governor launched cooperatives (Koperasi Wanita) that are managed by and for women. Each of these cooperatives consists of 25 women that are supported with initial seed capital of IDR 25 million to be applied to a revolving savings and loan scheme. Despite its positive intentions for women's economic empowerment, the model faces management problems due to women's lack of technical training and a lack of transparency. Furthermore, in practice, only a limited number of women, usually those from among local elites, are able to access the funds thanks to better connections and higher awareness of the scheme.

Pusat Pengembangan Sumberdaya Wanita (PPSW) and the National Secretariat of PEKKA have been facilitating the establishment of quite significant numbers of women-only cooperatives and microfinance institutions. Such efforts are intended to facilitate women's access to financial and productive resources. There is also an emphasis on enhancing women's leadership, such as through provision of credit for them to get higher educations. Women's cooperatives supported by PPSW in Rokan Hilir have been managing billions of IDR of savings and helping their members manage their plantations and paddy fields.

Although cooperatives, including women-only cooperatives, are considered to be one of the main Indonesian economic development pillars, supporting them at the field level is very much dependent on local government political will and commitment. In East Sumba, for instance, institutions supporting cooperatives are still far from meeting expectations in terms of providing adequate financial and technical support for the establishment of local cooperatives.²²

In terms of technical support through extension training facilities, there are reported cases of agricultural extension workers tending to ignore women farmers. For example, a gender analysis conducted in the Karawang District of West Java Province found that women farmers' access to agricultural information is directly dependent on land ownership; i.e. hired workers have less access than those who own land. One reason is that formal agricultural extension service providers invite only men who own land to attend village meetings. Therefore, women, who are most in need of agricultural information, do not receive enough attention (Meadows, 2013). Such imbalance is also reflected in the number of women regular field extension staff (7 154 out of 27 922 people) and women extension workers on three-year contracts (4 358 out of 24 551 people) in 2011. One of the main responsibilities of the district agricultural extension offices is to provide logistical and technical support to farmers, including women and rural youth. This means that when female human resources are not sufficient, women farmers will be less exposed to required trainings and similar services from formal channels (Qamar, 2012.).

Another critical issue is that women are less likely to have access to leadership and decision-making positions. It is believed that organizing rural women into groups is vital for their empowerment. This not only helps with more effective programme implementation but also becomes an important tool for building women's capacity to receive knowledge and information and to gain self-confidence and leadership skills. So women will be able to identify their aspirations and raise them during public discussions and take collective actions if required. A number of initiatives, such as the Food Barn Village Programme that is one of the Gol's efforts in achieving household food security in east Java, explicitly target women farmers to shape and empower their groups as well as building and strengthening networks among women farmer groups (Yuliatia and Iskaskar, 2016). However, most agricultural organizations in Indonesia have only male members. Mixed farming groups with active female and male members exist but are rare. In other words, agricultural organizations are often dominated by men. At the community level, these organizations play a crucial role in agricultural decision-making processes, from selecting the seed varieties to be cultivated to determining planting dates and irrigation schedules.

 $^{^{21}}$ For detailed information on conventional banks versus Islamic banks, see Anwar (2016).

 $^{^{\}rm 22} \, \text{Based}$ on a field assessment of FAO's field project conducted as part of this study.



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Case studies in Yogyakarta and South Sumatra indicate that there are a few women-only organizations, but that these have very little power to makes their voices heard (Akter et al., 2017). This implies that despite the presence of women farmer organizations, they tend to be left behind in community decision-making processes. However, many women farmer groups and fish processing groups are currently established and supported by the Government of Indonesia in agricultural subsectors. In 2017, there were 558 766 farmers groups, of which 23 601 (i.e. 17 percent) were women-only groups (Ministry of Agriculture, Centre for Agricultural Data and Information Systems, n.d.). It is worth mentioning that, according to the gender analysis pathway (GAP)²³ conducted by BAPPENAS, existing women's groups (or the ones that are specifically formed to get access to facilities of a certain project) normally become very active through the support they receive. However, the sustainability of such groups remains a big challenge.

4.2. Gender in the marine and fisheries sector

Indonesia is the biggest archipelago state in the world, with a total sea area of 5.8 million km². In other words, around two-thirds of the area of the Republic of Indonesia is sea that consists of 2.3 million km² of archipelagic waters, 0.8 million km2 of territorial waters, and 2.7 km² of exclusive economic zone (EEZ). The country has a total of 17 504 islands that consist of big and small islands with a long coastline of 104 000 km. Indonesia is strategically located between the Pacific and Indian Oceans, with some of the world's most varied marine biodiversity. More than 80 percent of the cities in Indonesia are located in coastal areas. Economic resources and maritime services have high potential, including in areas such as biotechnology, energy and minerals, sea fisheries, nautical tours, the marine industry and sea building. As an archipelago state, Indonesia has many natural resources in the marine and fisheries sector. There is currently a focus on product upgrading and productivity of marine and fisheries businesses and diversification and market segmentation of marine and fisheries products, materialized through sustainable marine resources and fisheries management. Marine development

strategy is approached from the following four perspectives: (1) stakeholder perspective; (2) customer perspective; (3) internal process perspective; and (4) learning and growth perspective. Moreover, there are nine strategies for marine economic empowerment, namely: (1) nautical insight and culture; (2) human resources, knowledge and technology empowerment; (3) marine governance; (4) marine economic development through industry and marine services; (5) enhancing skills of supervision of resource utilization; (6) disaster mitigation and sea pollution countermeasures; (7) conservation; (8) welfare acceleration; and (9) sea area development.

As a country with a great deal of sea territory (i.e. as wide as 54 million hectares) and diversity of fisheries products, Indonesia's fisheries production potential is 0.9 million tonnes in a year. The country comes second in food fish and aquatic plants production globally, with 13 118 206 tonnes per year. It also comes second in marineculture of seaweeds, producing 9 298 474 tonnes annually (FAO, 2015). Indonesia's fisheries sector has the potential to stimulate the economy at both the macro and micro levels. At the macro level, the fisheries sector has become an important contributor of foreign exchange from export activity. At the micro level, the fisheries sector has impacted worker availability and has accelerated society's purchasing power along with the increasing of revenues in the fisheries sector (Nugroho, 2013). According to BPS, the contribution of the fisheries subsector to national GDP remains stable compared to the constant rate of 2.27 percent, while the prevailing market price of fish and fishery products increased from 2.51 in 2015 to 2.56 in 2016. In 2017, Indonesia exported USD 3.2-4.1 billion of fish and other sea catch. Although this amount was only 41.6-53.7 percent of the targeted value, the marine and fisheries industry still has good prospects for growth and becoming a major source of foreign currency (California Environmental Associates, 2018). There is an upward trend in export value of fish and fish products, from USD 3.9 billion in 2015 to USD 4.5 billion in 2018 (FAO, 2019).

Women play an important role in fisheries value chains in Indonesia, particularly in post-harvesting activities. While men play an almost exclusive role in fishing and fish transportation activities, women are

²³GAP is a gender analysis tool developed and introduced by BAPPENAS for developing gender profiles in order to develop gender-sensitive planning and budgeting programmes.

much more engaged in fish processing, marketing and trading. It is reported that small-scale fish trading is mainly done by women, who are usually called jibu-jibu or papalele (local terms for vendors in Muslim and Christian communities, respectively). In small ports, these women, many of whom are the wives of artisanal fishers, boat crew members or full-time fish traders, gather to meet incoming fishing boats to compete for baskets of freshly caught fish, the prices of which are set early in the morning. There is no credit system and all transactions are in cash (Novaczek et al., 2001). Women's role as fish merchants is quite significant to household livelihoods (Indrawasih, 1993). Nevertheless, the contributions of women in coastal communities have been largely undervalued or underappreciated (USAID, 2017). Different gender roles and responsibilities between women and men in the industry have implications for access to and control over resources, as well as knowledge on these activities. Studies have noted several important issues pertaining to women in coastal areas. Socially, these women are unorganized and lack access to public dialogues and decision-making processes. Economically, since they have limited access to information, technology and markets, women are poorer than men and their productive activities are confined to a relatively small scale. From an administrative perspective, as women in coastal areas are not recognised as fishery workers and remain unseen in the data, getting organized and gaining access to government support is more difficult for them (Adisasmita, 2008). The Desa Prima programme intended to address the last issue, with a focus on areas with potential for a snowballing effect in terms of social and economic empowerment of women of coastal villages.

Coastal women play several roles simultaneously to sustain their household livelihoods. The social role that coastal women assume is rooted in the gender division of labour prevailing among coastal communities. This system reflects both the local environment and the economic activities that are the main focus of coastal community life. Coastal women are not just "complementing" or "assisting" men in the fulfilment of their households' economic needs, but also determine the availability of economic resources. In some communities, the role of women extends beyond usual family caretaking and daily food providing to include "the accumulation of wealth for the enhancement of the material and spiritual well-being of the family," as has

been documented in a fishing village on the island of Madura (Niehof, 2007). As the village depends on the economic value of fish, and it is women that largely control, determine and manipulate the value, women's contribution to community economic development is substantial. Such economic positioning helps women gain stronger bargaining power within households. In many fishing households, wives typically share the power to make certain decisions and control the management and expenditure of household economic resources.

The economic and livelihood issues of coastal communities are deeply felt in isolated, impoverished fishing villages that are away from the centres of regional economic activity. When fishermen have difficulty obtaining incomes, female members of coastal communities have to bear the burden of feeding children and taking care of their families with restricted resources (Kusnadi, 2003). It has been observed that fishing households face difficulties when relying solely on fisheries-based activities because fisheries resources are in decline (Illo and Polo, 1990). Therefore, in order to survive and increase household incomes, fishing households develop diverse economic strategies outside the fishing sector, such as trade, farming and raising livestock. If these additional livelihood activities are supported, women can actively participate. Additionally, marine resources (e.g. coastal waters), can be utilized for aquaculture and seaweed cultivation, among other alternatives to fishing. Among these, female involvement is greatest in seaweed cultivation and processing. The processing of seaweed raw material into various types of products, including products for the food industry, can be an alternative livelihood for fishing households and can be fully managed by women.

So far, products of small to medium-scale industries in fishing villages have limited reach of consumers and marketing areas because they are offered for sale only in the nearest district (Kusnadi and Mak, 2005). For example, in Dungkek Village, East Sumenep, women members (fishermen's wives) of the Makmur Fishermen's Group process products such as gelatine, meatballs, candy, sweets and *jenang dodol* from seaweed raw materials. This village is quite isolated geographically and is about 25–30 km from Sumenep City. The technology and equipment used to produce these products are obtained through the aid of higher education institutions engaged in community empowerment activities in Dungkek

Village. Knowledge of seaweed processing is transferred through training activities. Women's involvement is just as important as that of men for the improvement of the coastal economy. This is not only because of the strategic role of women in the household, but also because women serve as buffers for their families in the face of uncertain and insufficient sea-based incomes (Kusnadi, 2006). There is, however, no quantitative data on women in marine and fisheries-related businesses. In fact, women's work in coastal communities is not counted in national government census collections under fisheries-related employment at the district administrative level (Fitriana and Stacey, 2012). As many NGOs criticize, the lack of gender-disaggregated data on the marine and fisheries sector is due to divergent perspectives on the definition of women fishers (nelayan perempuan) (Pratiwi and Gina, 2017). According to the Ministry of Marine Affairs and Fisheries,24 women are mostly engaged in fish processing and marketing, while men focus on heavier physical tasks like fishing and transporting fish. Nevertheless, the participation levels of women and men in fisheries value chains are relatively comparable in terms of working hours and income contribution. Given the division of roles and responsibilities between men and women, it is not surprising that men were found to be more knowledgeable in fishing activities while women have more knowledge in fish processing and marketing. This has been reinforced at the community level through perceptions that women are not suitable for fishing activities, either due to physical factors or to their childcare and domestic responsibilities (USAID, 2017). As a result, men control the access to physical resources (ships, fishing gear and industrial-scale processing units), whereas women tend to have access to small-scale processing units and local marketing activities.

While it is also the case that there are women in capture fishing, their involvement is rare and much less significant than that of men (Faculty of Fisheries and Marine Science, 2018; Siason *et al.*, 2002). The above-mentioned issues over the definition of women fishers may impact their access to development facilities and benefits, including the

most recent policy on the Fishery Card and work insurance.²⁵ The perception that women's role in fisheries is largely relegated to processing also illustrates a gender bias related to women's domestic roles in food providing and cooking. Moreover, it reflects the lack of acknowledgement of women's diverse roles in the sector. It remains the case, however, that women's activities and contributions within the sector are constrained by their childcare and domestic responsibilities. Within communities, women play the dual role in taking care of their families while working to earn incomes. As a result, they face significant time constraints due to their unpaid care and domestic work and have poor access to financial resources due to limited or no collateral. Women's businesses such as fish processing and marketing are often considered as micro- or small-scale enterprises lacking in potential to attract additional credit from financial institutions to expand or upgrade. Underlying cultural and social norms that limit the role of women also apply in the marine and fisheries sector, in which the role of women is often determined based on the physical demands of the tasks and on traditional gender roles. This means that women have limited access to resources such as fishing boats and raw materials. Additionally, lack of access to safe public transportation to landing centres or harbours for women fish vendors makes them more vulnerable to harmful conditions, including sexual harassment and abuse

It should also be noted that women engaged in aquaculture production and marine value chain activities come from different socio-economic backgrounds. Therefore, the nature of their involvement (as well as the outcomes of their involvement) depends on if they are from poor families and/or if they are educated and/or if they are financially and emotionally supported by their spouses. A number of case studies show that poor women are mostly engaged in casual labour in the fish processing sector, while women from medium and high wealth groups are able to engage as owners of processing and trading MSMEs. In any case, the scope of women's economic empowerment is limited to mainly low-return roles in the aquaculture

²⁴ From field visit interviews.

²⁵ Fisherman's insurance is a contract between fishermen or fish raisers and an insurance company to protect them in the case of fishing or fish raising risks. In order to get the insurance, fishermen should get a Fishery Card that is issued by the Ministry of Maritime Affairs and Fisheries. It serves as identification for fishermen and is also a government instrument in carrying out the policy.

industry. Furthermore, this empowerment will not directly translate into gender equality unless it is supported in every respect (Sari et al., 2017). The Coral Reef Rehabilitation and Management Programme, Phase II is a good example of improving coastal and fisher women's capacity to engage in coral reef management and community development by increasing their economic and social empowerment at the same time. At the time it was developed, the programme was considered to be innovative because it had adopted a gender approach aimed at transforming women's economic and social status and fostering change in household and community welfare and in coral reef management. Women were encouraged to work through community groups and to take up leadership roles in the administration and management of the programme (The World Bank, FAO and IFAD, 2009).

4.3. Gender and forestry

Indonesia is endowed with rich natural resources, particularly forests with both economic and non-economic value. According to 2016 forestry statistics, Indonesia has 130.66 million hectares of forest (Ministry of Environment and Forestry, 2017). This ecosystem provides habitat to a huge number of fauna and serves as a food storage and energy source for people living within or in the edge of forests. The importance of Indonesia's forest resources, both on a national and a global scale, is difficult to overstate. They are home to unmatched levels of biodiversity while simultaneously serving as vital carbon stocks in the face of global warming. This means that forest degradation has far-reaching implications for global well-being, in addition to severe consequences for Indonesian people.

Indonesian forest land is classified into the categories of (a) conservation forest (26.8 million ha); (b) protection forest (28.86 million ha); (c) production forest (32.60 million ha); (d) limited production forest (24.46 million ha); and (e) convertible production forest (17.94 million ha) (Directorate General of Social Forestry and Environmental Partnership, n.d.). These are mainly administered by the Ministry of

Environment and Forestry, although there are some large areas that have historically been managed by local communities. Recent legal and administrative decisions aim to entrust the management of forests to the local communities in and around the forests in the hope that these communities conserve biodiversity. In 2016, it was announced that 12.7 million ha of conservation forest land would be allocated to communities on the condition that there be no trading nor any change in land function (Boedhihartono, 2017).

Forest-related development will have critical implications for the 2 805 villages inside forests and the 16 605 at forest edges,²⁶ where many villagers strongly depend upon forest natural resources and need sustainable availability and accessibility of these resources for their survival. Another set of data shows that there are as many as 31 957 forest-based villages if indigenous peoples' territories in and around the forest zones are taken into account (MoFE 2007; BPS 2009). Approximately 71.06 percent of these villages are dependent on the forest resources (Komnas HAM, 2016). Indigenous people are believed to have a remarkable relationship with Indonesia's tropical forests both in their livelihood activities and stewardship efforts that promote conservation. Indigenous people of Indonesia are comprised of over 1 128 tribes from many different ethnic groups. The population of indigenous people is estimated to be as many as 70 million, half of whom are women (Association of Indigenous Women of the Archipelago, n.d.).

Perempuan AMAN²⁷ notes that indigenous women have knowledge and skills in the management of natural resources and other resources, as well as related spiritual and cultural values, and that the importance of their economic, social and cultural interactions for future generations should be recognized. Indigenous women have historically managed forest natural resources for food security, traditional medicinal herbs and natural dyes for traditional clothes, as well as for traditional rituals. In other words, they have strategic interest in sustainable forest management that ensures their access to forest resources to maintain knowledge

²⁶ Data cited from "Identifikasi desa dalam kawasan hutan" for 17 provinces in 2007 and 15 other provinces in 2008. Pusata Rancangan dan Statistik Kehutanan, Departemen Kehutanan, Direktorate Statistik Pertanian, BPS 2007 and 2009.

²⁷ AMAN stands for Aliansi Masyarakat Adat Nusantara (Indigenous Peoples Alliance of the Indonesian Archipelago). Perempuan AMAN (Association of Indigenous Women of The Archipelago) is a unit under AMAN with specific focus on indigenous women's issues, based in Bogor. This organization was established in 2012 to help indigenous women organize themselves and make their voices heard.

and skills that have been passed down through generations (Anggraini, 2016). Indigenous forest women of Indonesia have traditionally been bearers and keepers of seeds that support the food security of their communities. In this sense, their overall contribution to flora biodiversity is significant. Additionally, they are holders of knowledge of traditional skills connected to their livelihoods, such as shifting cultivation/rotational agriculture and gathering of non-timber forest products, among others (Maranan, 2015). However, indigenous women face multiple obstacles, including poverty as well as discrimination based on gender and ethnicity that hinder them when it comes to fully participating in community development.

In terms of the role of gender in protection of biodiversity, it is assumed that while men tend to be more concerned over soil and land conservation, women tend to be more concerned over biodiversity conservation, especially in relation to plants. A study in South and Southeast Sulawesi asserts that this is in line with men's and women's gender roles; i.e. they are most concerned with what they deal with most often in their daily lives. Usually, men deal with issues of soil and land erosion or landslides while women have the responsibility of fulfilling household nutrition, for which the rely on a variety of plant species from mixed gardens for food, as well as for medicine and making simple tools (Mulyoutami et al., 2012).

Forest degradation has become a serious problem in Indonesia in recent decades. Based on data of the Ministry of Forestry, at least 1.1 million ha, or 2 percent, of Indonesian forest has been cleared annually, resulting in the total loss of 42 million ha so far. Major threats to Indonesia's natural forests are illegal logging, conversion of forest land to cash crop plantation, fire, unsustainable forest exploitation for settlements or industry, and encroachment (WWF-Indonesia, n.d.).

Forest conversion has a devastating impact on local communities, especially women, who are dependent on forest resources, as well as having negative impacts nationally (WWF-Indonesia, n.d.). The loss of forest, which affects availability of clean water and causes water scarcity for smallholder farmers, undermines both food security and human health. Such effects hit local and indigenous women particularly hard because they have to go to greater lengths to collect forest products such as firewood,

fodder, food items and other non-timber products, for which they are primarily responsible. This is even harder for those from landless and land-poor households that rely on forest resources for their subsistence.

Several studies note that development with a focus on economic sectors and driven by markets tends to undervalue forest resources and lead to environmental degradation (Colfer et al., 1997; Mulyoutami et al., 2012; Li, 2015). The privatization of forest resources involves a shift from customary tenure systems to formalized market-based private property systems. In cases where the Government of Indonesia has given concessions to local smallholders for enhancing their livelihoods, such land privatization has sometimes weakened the position of women in land ownership since the name on the land certificate is usually the man's, especially when the land has been purchased. The registration of smallholdings in men's names means that local and indigenous women miss the opportunity to formally gain ownership of a valuable new resource caused by forest land use conversion. It has also been reported that in some indigenous territories where communities practice a matrilineal kinship system or where women have traditionally inherited an equal share of land from their parents or have benefited from co-ownership of conjugal property, the newly modified system strengthens men's forest land ownership, resulting in erosion of women's customary land rights (Selvarajah, 2013; Li, 2015). Furthermore, as land is commonly used as collateral for credit access, women and children are most threatened when men fail to return the credit. This implies that when women are entitled to apply for loans, better repayment performance is observed because land used as collateral is critical to their families' food security and thus women are concerned not to lose it.

The livelihoods of local and indigenous communities living within and on the edges of forests are affected differently when the privatization of land tends to shift ownership over to big business players of the private sector that replace natural forests with tree cash crop plantations. Under such circumstances, men are more likely to get jobs as migrant workers outside their villages. This affords them more options to earn income as compared to women, who, with their limited skills and domestic responsibilities, get engaged in casual/part-time work. This means that while forest conversion and degradation have

implications for the lives of both women and men, the impact on men is somewhat mitigated by their relative mobility (Colfer and Minarcheck, 2013).

Forest management institutions at the local level in Indonesia are still dominated by male community members, and women's participation in all phases of forest management and related decision-making processes remains minimal. It is important to note that communities are not homogenous entities. There are different social, economic and gender dynamics within communities that influence their ability to access resources from forests. Such local differences, particularly around gender, are important to understand when initiatives such as social forestry programmes are put into action. Without safeguards. particularly concerning gender, in place, promoting social forestry might benefit the elite and further marginalize some groups in a given community, especially woman (Setyowati, 2016.). On the flip side, research demonstrates that women's participation in community forest management bodies has led to positive results for both forest sustainability and gender equality. Therefore, women's participation in the governance of natural resources is crucial for sustainable development (ADB and UN Women, 2018).

The Social Forestry Programme has already fostered wider community participation and better forest management. In regards to poverty alleviation, a study by the Indonesian Institute of Science (LIPI) in several locations in 2014 demonstrated that this programme has significantly contributed to local economic development. For instance, community members living in Kalibiru, Kulon Progo district, have benefited from an ecotourism initiative in their community forests that is generating a shared income of around IDR 2.4 billion per year. Nevertheless, the study found that the ability of communities to derive benefits from natural resources is also determined by a range of other factors, such as access to information, markets, decision-making processes and networks. When indigenous and local people receive less protection compared with big businesses that have gotten concessions for logging, mining and cash crop plantation, the goal of poverty alleviation cannot be reached due to multiple forms of discrimination (Asia Indigenous Peoples Pact, 2013). The Social Forestry Programme, with the aim of bringing more justice into forest resources utilization, attempts to promote the role of communities as the main actors in managing forest resources. It is reported that one

key factor in the Programme's success has been the improved participation of local communities. In terms of mobilizing the community, especially women, one challenge is how to effectively involve them in planning and decision-making processes (Shahab, 2018). It is a widely held view that women from marginalized local and indigenous communities are less likely to attend community meetings, where community governance matters, including forest management, are decided. The management of coastal mangrove forests faces the same challenges of encouraging women to take part in committees and executive bodies (Banjade *et al.*, 2017).

4.4. Women and climate change

In Indonesia, a number of recent climate-related natural disasters, such as earthquakes and tsunamis, have highlighted the country's very high exposure and vulnerability to climate extremes (Bündnis Entwicklung Hilft, 2018). The disasters wrought by climate change have particular implications for women, increasing their risks and vulnerability to poverty. As women are more likely to rely on agriculture for food security, are responsible for collecting water and are involved in small-scale fisheries, climate change affects their livelihoods, income and employment prospects, while putting their health at risk and increasing their time burdens (ADB and UN Women, 2018). Most women working in the informal and agricultural sectors are economically vulnerable. They are therefore most affected by the impact of climate-related natural disasters. Most of these women are engaged in subsistence farming with low productivity and high vulnerability to climate change, and many of them lack land tenure rights. Vulnerability, poverty, environmental degradation and climate change are closely related since environmental disasters and climate change exacerbate poverty, frustrate economic gains and negatively affect the poorest and the most vulnerable.

Women living in rural areas, forest areas and coastal areas are particularly vulnerable to the effects of climate change. Women agricultural labourers risk losing their jobs due to land conversion and drought. Women living in forests who depend on forest products for food, medicine, firewood and water will find it difficult to find these sources in the future. Women living on the coast will also find it very difficult to cultivate seaweed to supplement

household income. Such challenges will intensify the workload of women as domestic economic actors. It should be noted that women working in the agricultural sector and those dependent on forests earn lower incomes than women working in other sectors. Rural men may leave their jobs and seek other livelihoods in the city, for example, as construction workers, but this creates additional work for the women left in the villages.

The impacts of climate change and related natural disasters are also especially pronounced for women and girls due to underlying gender inequalities and socio-economic disadvantages. The conditions of women who live with husbands may differ from single mothers and widowed women. In the face of natural disasters, married women may have the possibility of relying on the incomes of their husbands who may work in other sectors. Single mothers and widowed women are more prone to vulnerability because they have limited social safety nets. Some of these women become heads of families because their husbands have migrated to other countries to work. Many female-headed households (FHHs) struggle to meet the needs of their family members while facing further hardship from climate-related disasters such as draught and floods. Heavier burdens are also borne by FHHs with limited assets, as ecosystem damage from climate change, including damage to agricultural land and fisheries, greatly affects the survival of such households. It is difficult for poor FHHs to tackle the multifold problems caused by climate change, such as obtaining new shelter, getting credit for starting a new business or acquiring new land as a source of livelihood (Pratiwi, Rahmawati, and Settiono, 2016).

In the Indonesian context, there is ample evidence that women are disproportionately vulnerable to the effects of climate change. The impact is particularly felt in sectors traditionally associated with women, such as in agricultural and plantation areas. As an illustration, data from the Indonesian Peasant Union show that around 70-80 percent of workers in agriculture are women, while in 2007 around 6 676 hectares of agricultural land failed to be harvested due to flooding. It is certain that women farmers are one of the groups most heavily affected by floods (ADB, 2016). Degraded land conditions due to seasonal changes, reduced availability of clean water, reduced agricultural production and the increasing difficulty of predicting climate to plan for cultivation (due to changing rainy and dry season

patterns) will clearly increase the risks of hunger and poverty among women (Nellemann, Verma and Hislop, 2011). Climate change also affects fishing households. Rising sea levels together with weather uncertainty, rising sea surface temperature and other adverse effects caused by climate change expose fishing households to the risk of losing their income sources and prompt some to migrate. When faced with increasingly limited natural resources, women from poor fishing households are often faced with an even heavier burden than usual.

Furthermore, given underlying gender inequalities, climate change-related disasters have exacerbated women's socio-economic disadvantages compared to men, including in the areas of disaster preparedness and prevention, response and rehabilitation. During and after disasters, women are more vulnerable to gender-based violence. They also tend to have less access to resources that will help them cope with or recover from disasters. Additionally, women have less access to information, mobility and the policy decision-making processes that determine who are most affected by natural disasters.

Traditional gender roles and expectations, including discriminatory social norms, can make it more challenging for women to cope with or escape from disasters. These include women's responsibility for taking care of children, the elderly and sick household members, which hinders their ability to escape, as well as their limited access to early warning information and their restricted decision-making power in the household, which may force them to stay behind. Data on the 2004 tsunami in Ache found that 77 percent of mortalities were women, due to underlying gender inequalities and socio-economic disadvantages (OXFAM International, 2005). Women in many developing countries, including Indonesia, are responsible for meeting family needs, including for clean water and food. But natural disasters make it more difficult for women to access various resources, such as water, sanitation and energy for cooking. In some cases, this situation becomes a matter of life and death for women.

Despite the disproportionate impacts of climate change and related disasters on women, women can also play a critically important role as agents of change in response to these. Studies by Oxfam have highlighted how women are able to minimize the impact of climate change through institutional and

social measures and at the same time find a way out of poverty. Women are therefore potential change agents not only within their families but also in their wider communities (Terry, 2009). A number of other studies show that, in the implementation of the National Programme for Community Empowerment (Programme Nasional Pemberdayaan Masyarakat, or PNPM), women have been encouraged to participate in climate change adaptation and mitigation efforts at the village level. In the implementation of PNPM Green, which focuses on environmental issues with the aim of raising communities' awareness of how to improve their livelihoods while simultaneously decreasing their vulnerability to climate change, the same affirmative actions, rules and regulations on women's empowerment have been applied. with rural women's participation at all levels of implementation required. Additionally, PNPM Green ensures that a minimum of one proposal is submitted by a women's group in each village involved (Lestari, 2017). It has been reported, however, that village women's groups have had difficulties in influencing decision-taking processes for several reasons, including persistent gender stereotyping. Moreover, women's proposals can hardly compete with men's in terms of budget allocation and/or number of beneficiaries, as village women tend to propose less expensive projects with a fewer beneficiaries, whereas men generally demand funds for expensive infrastructure projects, such as micro-hydro power projects. The project proposals of village women's groups are therefore often rejected (Azarbaijani-Moghaddam, 2014; Lestari, 2017). Yet, given the important role of women in mitigating and adapting to climate change and disaster risks, this role must be recognized, supported and strengthened if sustainable development is to be achieved in Indonesia (ADB and UN Women, 2018).



5.1 Findings

Gender-responsive agricultural programming in Indonesia requires acknowledging gender gaps throughout the sector. In general, the Government of Indonesia considers the importance of gender equality in broader development and poverty alleviation goals. The major findings from this Assessment are summarized in three categories below to highlight the main obstacles to achieving gender equality goals, as set in SDG 5, and challenges for fulfilling commitments towards women, as outlined in the National Medium-Term Development Plan for 2015–2019.

At the macro/policy level:

- Numerous policies and laws have been endorsed to accelerate gender equality since the beginning of the reform process in Indonesia. All ministries and relevant agencies are mandated to mainstream gender considerations into their planning and budgeting. MoWE-CP leads gender mainstreaming processes and has already established mechanisms to ensure the implementation of gender equality strategies and plans. Each ministry has a gender mainstreaming working group responsible for gender-responsive planning and budgeting based on sex-disaggregated data collection and analysis. Furthermore, there are laws directly related to agriculture and rural development, such as Village Law No. 6/2014, which acknowledges the role of women in the rural economy and supports their empowerment.
- Acknowledged by MoWE-CP, the significant experience of the Ministry of Agriculture in integrating gender into its programming places it in a mentorship role for other ministries endeavouring to achieve better performance on gender mainstreaming implementation. To facilitate this, it has a separate website on gender mainstreaming-related information. However, consistency in the updating of sex-disaggregated data is a big challenge. The most critical finding of this Assessment is that, despite the availability of updated data, the low capacity on gender analysis as the basis for gender-responsive planning and budgeting. Indeed, the need for documenting good practices on gender equality efforts and achievements is vital.
- Despite the above-mentioned achievements, gender inequality persists and in turn perpetuates poverty and vulnerability. Some laws and regulations are rarely practiced, such as the

Marriage Act of 1974 that regulates the ownership rights of wives and authorizes joint titling. Most married couples are not informed about the provisions of this law when they register. In other instances, rural women's low levels of education in addition to prevailing patriarchal mind-sets prevent them from taking advantage of statutory regulations. Furthermore, customary laws, especially on land rights, often place women at a disadvantage in the ability to use and control land. Both statutory and customary practices in many ways keep rural women confined to their traditional roles, with limited means of dealing with complicated changing tenure systems in Indonesia.

At the meso/institutional level:

- Despite the leading role of MoWE-CP in gender mainstreaming at the sub-national level, local commitment to promoting gender equality and women's empowerment is critical. Local offices are generally lacking in required human and budget resources and have merged with other administrative units, such as family planning. In many cases, gender mainstreaming is perceived as additional work that becomes a burden, especially when there are insufficient numbers of regular female field extension staff. As already mentioned, there are numerous policies and regulations concerning the agricultural sector and its subsectors that oblige local governments and their partners to increase woman's role and involvement in family businesses, such as in fishing, fish farming and salt farming households. Yet many projects suffer from insufficient institutional support, resulting in gender-blindness of activities and outcomes.
- A number of interventions have succeeded in helping communities to understand and challenge the conditions that perpetuate inequalities between men and women. Thus far, these have mostly attempted to engage rural women in productive activities and potential income generation processes as well as helping them to raise their voices in decision-making process, such as village-level dialogues for development planning (musrenbangdes) and representation in regency-level dialogues. Certain programmes have facilitated formation of women's groups, based on the belief that establishing women-only groups is a strategic approach for empowering women. Despite such achievements, women farming organizations have little power to make their voices heard, are sometimes left behind in community

decision-making processes and face challenges in sustaining themselves. This means that there is a need to support rural women's groups so that they grow and are able to gain benefits from members' collective actions.

At the micro/community level:

- Despite their key contributions to agriculture, forestry and fisheries, Indonesian rural women are often invisible. Female employment in agriculture is a little more than a quarter, while the rest of those employed in agriculture, hunting, forestry and fishing are men. National statistics systems do not take into account the various unpaid caregiving roles in households that rural women are engaged in daily. Hence, recorded contributions of women to national income continue to be insignificant.
- Rural women play important roles in subsistence food production. They also contribute significantly to food production and processing. Yet they face persistent and systematic barriers to improving their livelihoods. In their productive work, they are unable to utilize existing resources as much as rural men do because they lack access to credit, technology and other required resources. Lower rates of literacy among rural girls and women prevent them from receiving training on agricultural technology and other topics. Furthermore, limited land ownership of rural women makes formal extension service providers less likely to target them. This limitation also inhibits rural women from directly applying for credit and acquiring the capital required for improving their livelihoods. With less access to resources, rural women have had limited opportunities to develop strategies to enhance their small businesses.
- Gender relations and decision-making patterns are influenced by the prevailing socio-economic and cultural systems in the country. This means that rural women that are engaged in agriculture but lack essential resources, are in a weak bargaining position and have a limited ability to engage in decision-making processes within both their families and communities. These societal obstacles have prevented rural women from fully enjoying the achievements of present development programmes.

- Women in fisheries face similar problems to women in farming. In coastal and indigenous communities, as in other rural areas, men are assumed to be the heads of households and the main breadwinners. This widespread perception makes it quite difficult for women to be recognized as producers in most regions. Their role as the head of the family is recognized only when there is no male adult in the family. Nevertheless, customary norms influence gender roles in coastal and indigenous communities in different ways. Women have traditionally been engaged in post-harvesting activities, with proven skills in merchandizing seafood products. However, insufficient quantitative sex-disaggregated data on women in fisheries businesses undermine the recognition of their contributions to the fishing industry.
- Recent land conversion and forest degradation have affected the livelihoods of poor forest-dependent communities, especially of indigenous women. For them, forests are far more than material resources; they are key to ecosystem health, food security and biodiversity, as well as sources of natural herbs and natural dyes and sites for traditional rituals. Huge plantations and other extractive development projects are gender-blind, as women's needs have not been addressed due to their absence from decision-making processes.

5.2 Recommendations

The following recommendations underline areas of work that can promote rural women's empowerment and enhance gender equality in the agriculture and rural development sector. Table 11 lays out how both the Government of Indonesia and FAO may align their commitments and maximize their impact for addressing gender inequality in the rural economy of the country. The recommendations are categorized into the three levels of (1) policy (macro);

- (2) institutional (meso); and
- (3) community/household (micro).

Table 11: Recommendations for Gol and FAO

Level	For Gol	For FAO	
Macro (policy)		Advocate for deeper integration of gender equality concerns into the Village Law No. 6/2014;	
		Promote the importance of gender mainstreaming in climate policies, practices, and research, including	
		activities around climate finance, to ensure that projects help women and men to reduce their vulnerability and adapt to the impacts of climate change;	
assets are ensured; Develop a comprehenequality and women's agriculture and rural deprogrammes to improse at the national and sul (e.g. more engagemer Rural Development); Improve gender-sensichange and disaster ricollection of sex-disage conducting gender and SDG monitoring frame climate vulnerability a will influence the police		Ensure that clearly defined gender targets of projects are fully understood	
	Develop a comprehensive policy on gender equality and women's empowerment in agriculture and rural development-related programmes to improve existing approaches at the national and sub-national levels (e.g. more engagement with the Ministry of Rural Development);	by all stakeholders and partner organizations, and work to strengthen their sense of ownership on gender-related targets.	
	Improve gender-sensitive responses to climate change and disaster risk reduction through collection of sex-disaggregated data and conducting gender analysis in line with the SDG monitoring framework. Gender- sensitive climate vulnerability and capacity analysis will influence the policy choices taken by the Government at all levels;		
	Ensure gender-balanced participation in policy-making processes so that needs and perspectives of women and men are adequately addressed.		

Table 11: Recommendations for GoI and FAO (continued)

Level	For Gol	For FAO
Meso (Institutional)	Support national-level ministries to engage in capacity-building efforts on gender equality for sub-national level offices, in collaboration with NGOs and universities, by delivering training courses on gender-related issues to university	Provide gender-sensitive data to inform programme design and strategies in order to bridge gender gaps and provide measurable indicators to monitor progress;
	lecturers (widiaiswara); Clearly highlight gender gap issues and define gender-responsive indicators to measure agricultural and rural development programme outcomes;	Provide handy materials on gender and agriculture and rural development, highlighting smart practices, to be circulated among field-level teams and local partners;
	Enhance the role of sub-national village development offices so that they are actively engaged in the issues of women's empowerment and gender equality, not only at the regency level but also at the field level;	Promote gender mainstreaming for the whole sector of agriculture and rural development by organizing and facilitating workshops for local stakeholders and partners at programme locations;
	Further accelerate gender-responsive budgeting to support greater investment in women's capacity-building efforts, increased access to technology and information and strengthened leadership and group management, while supporting women's active participation in existing development planning mechanisms.	Support the government in generating concrete proposals for institutional arrangements that enhance rural and indigenous women's inclusion in decision-making and overall agriculture and rural development governance through highlighting good practices from FAO's global experiences.
Micro (community/ household)	Promote an integrated family farming approach through extension training and rural advisory services with encouragement of both women's and men's participation; Provide affordable quality childcare facilities at the village level to free up women's time and lighten their reproductive work burdens through existing community-based organizations; Strengthen monitoring and evaluation of gender-responsive policy implementation, including through regular tracking of expenses on gender-responsive budgeting and auditing; Promote credit facilities, using village-owned cooperatives or financial services (BUMDes), and make them accessible for women and men farmers.	Work through and with women's groups to increase their entrepreneurial, managerial and technical skills as well as raising their self-confidence and leadership capacities;
		Facilitate women's representation in community development planning dialogues and decision-making processes (musrenbangdes);
		Provide community members with more gender-sensitive training, such as creating demonstration plots, developing pro-women farmer field
		schools and organizing farmer exchange visits; Organize training workshops on gender-sensitive indicators for monitoring and evaluation and assist in setting up community-based mechanisms to improve service delivery.

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ANNEXES

Annex 1: Case study: women in seaweed farming and processing

This section describes the findings of the assessment of the FAO project entitled *Decent Work for Food Security and Sustainable Rural Development: Support to Selected Coastal Communities along the Seaweed Value Chain in East Sumba.*

One of the main goals of this FAO project in East Sumba is "decent work". Decent work is central to sustainable poverty reduction and is a means for achieving equitable, inclusive and sustainable development. Using the measurement indicators on decent work developed by ILO, this FAO project has fostered local employment opportunities for women and men through seaweed farming and processing. It has especially helped women to get engaged in processing seaweed products, which they are now able to rely on as a new alternative for generating income. The project has also promoted women's and men's equal access to decision-making processes at the household and community levels, including through women's representation in village development plan discussions.

This FAO project has engaged so positively with the East Sumba regency government offices that they now pay significantly greater attention to local economic development and women's empowerment. However, there is no available data on women's contribution within this sector, nor has any gender analysis been conducted to measure the changes. The district government, including technical district offices, still has limited concern over women's economic empowerment. There is no available sex-disaggregated data on marine and fisheries, including in seaweed farming and processing. The Government tends to view the sector from a gender-neutral perspective and so pursue gender-neutral development strategies.

FAO's initiative is in line with the strategic programme of East Sumba, which focuses on development of the marine and fisheries sector. This is reflected in the East Sumba Government Regulation No. 12/2010 regarding Spatial Area Planning of East Sumba of 2008–2009, with the following objectives:

- 1) Development of an "agropolitan" area to stimulate village growth;
- 2) Development of industrial areas and home industries in agricultural product processing, plantations and marine fisheries:
- 3) Development of a tourism industry with national and international potential, based upon rich natural resources such as beaches as well as culture.

Additionally, East Sumba's development priorities are:

- 1) Upgrading of marine and fisheries products;
- 2) Implementation of new technologies in agriculture, plantations, farms, and marine and fisheries;
- 3) Strengthening of human resources through trainings of agriculture, plantations, farms, and marine and fisheries instructors;
- 4) Development of new programmes for aquaculture, plantations, farms, and marine and fisheries.

Seaweed farming holds promising potential for East Sumba. There are about 15 000 ha of potential seaweed producing areas, of which only about 400 ha have been utilized so far. The local government has built a processing industry to produce seaweed chips, which offers a potential market for farmers. Seaweed farming and processing will be among the main avenues for economic development of East Sumba. This sector has huge potential for employment of local communities, including women. East Sumba City has great seaweed production potential, indicated by annual production rates, as listed in Table 12.

Table 12: Seaweed production in East Sumba, 2011–2015

Year	Production (tonnes)
2011	575.50
2012	1 393.80
2013	1 704.10
2014	2 858.30
2015	2 983.19

Source: Marine and Fisheries Department, 2016

Seaweed cultivation in East Sumba began in the early 1990s thanks to private entrepreneurs who introduced the technology to the village community, from cultivation to the drying process. The dry product was sold directly to entrepreneurs who would come to the village. The development of the seaweed sector is widening in line with the growing attention of the Government of Indonesia to the economic potential and development of East Sumba's coastal area.

Seaweed cultivation is an additional source of income for the fishing community. According to the villagers of Hadakamali who were interviewed for this Assessment, their fishing activities are on a very small scale, so seaweed cultivation has been an important source of additional income for fishing families. Furthermore, since seaweed farming only requires simple technology and the planting process is followed by a waiting period of 45 days of growing time before harvesting, the farmer still have time to undertake other productive activities.

Seaweed cultivation is generally done by family units, with women and men working together. Women's involvement in seaweed cultivation is not only in the preparation, planting and maintenance phases, but also at the harvest stage. This work is usually done together with men but can also be done by women alone. After harvest, seaweed is brought to the beach to be washed and carried to the mainland. At the post-harvest stage, women engage in sorting, separating seaweed that can be sold with seaweed to be seeded. After sorting, seaweed that is ready for sale is brought to be dried. For the seeding, seaweed seedlings are tied onto a rope that is prepared in advance. All work related to seaweed cultivation can be done by women, except for the installation of stakes in the sea.

Part of FAO's work is collaboration with community-based groups. Technically, women and men have their own groups. Women have more productive activities for income generation since they have received technical training on seaweed processing for snacks. There is no adequate information available on the characteristics of the men and women involved, nor adequate gender-based data to assess the gender equality objectives.

There has not yet been an initial study on the gender dynamics of the respective project areas, such as examination of the social and economic situations of the men and women involved. Nor is any gender analysis available on related government policies, programmes and activities. Although gender mainstreaming in development is a national commitment and has become mandatory for all government institutions, in reality, performance in this area at the regency level far from meeting expectations. This Assessment found it quite difficult to discuss and assess the level of knowledge and capacity on gender mainstreaming in government institutions of the regency of East Sumba.

Over the course of the fieldwork conducted for this Assessment, it was observed that the contributions of women (wives) to household earning is related to the amount of time devoted to productive, reproductive or social activities. From focus group discussions (FGDs) conducted separately with men's and women's groups, it is evident that women perform productive activities in seaweed cultivation and processing to make snacks. Women also help with catching octopuses near the shore. While women are not involved in fishing activities at sea, they are involved in fixing the tools, cleaning the boats and preparing men's supplies for their time at sea. There are several women who have opened fish product stalls to increase revenue.

Families with larger seaweed operations who are in need of additional labour hire both men and women as paid workers to prepare long ropes. According to the information gathered in the field, workers earn IDR 5 000–7 000 for installing seedlings on the ropes. Women are also active in raising livestock, such as chickens and pigs.

Seaweed cultivation is widespread in East Sumba, capturing considerable attention of the Government of Indonesia. Given the vastness of untapped potential, the number of villages involved in cultivation of seaweed is increasing more and more. One example of government attention is the establishment of a seaweed processing factory by the East Sumba government to provide seaweed farmers with a market. The revamping of the factory's management has resulted in improved prices for farmers, in addition to the opening of market price information. Farmers still have the freedom to buy and sell with any party. This openness benefits farmers because they have a alternative market in accordance with competitive prices. Women are involved in sales and have access to the same information about prices, including knowing the income that families get from cultivation.

Cultivation of seaweed requires a substantial amount of capital for the purchase of seeds, straps and seasoning equipment. When they have sufficient capital, the farmer's family usually adds paid labour. The binding of seedlings to ropes and the planting, harvesting and drying usually require the hiring of paid labour if a family's own labour is not sufficient. In the early days of seaweed cultivation in East Sumba by entrepreneurs, capital such as seeds and other business equipment was usually provided by the entrepreneurs. Farmers would cultivate the seaweed and then and sell it back, at a set quality standard, to the entrepreneurs. In-depth interviews with male and female farmers found that the role of private entrepreneurs is significant to them both in the transfer of cultivation technology and market access. There are few risks in seaweed cultivation other than potential damage caused by weather. But if the volume of business is large, potential losses can be large. When capital has been obtained from employers, farm families may become trapped in debt. In such cases, some women leave the village (even going abroad) to work as migrant workers. However, as the prices received from seaweed farming have improved, the need for job migration has decreased. Interviews with women indicate that they prefer working in the village managing seaweed cultivation rather than migrating for work, which they believe puts them at risk.

Unlike men, women are also involved in certain other social activities, especially those related to their domestic roles, such as checking into community-based integrated health posts (*posyandu*), with some even becoming managers. Women in coastal villages in East Sumba are accustomed to participating in community meetings, especially when conducted in their hamlet (*dusun*). Women can access and engage in village deliberations. Deliberations are also commonly open to members of the women's and men's communities. Only when village-level meetings are organized far from villages are fewer women involved, such as village development planning discussions/meetings or meetings at the subdistrict or even regency level. Luckily, in the FAO-affiliated community group there were several women with strong leadership skills. One of these women is able to strongly represent the interests of women in village-level meetings, and even at the district level, as well as in interactions with district technical offices. There is another woman that has become the leader of a seaweed cultivation group that also includes male men farmers. The same woman is also a board member of a village consultative forum (*Badan Permusyawatan Desa*).

Similar to other traditional communities in rural Indonesia, women in rural coastal areas of East Sumba are responsible for domestic and family activities at home, such as cooking, washing and childcare, as well as going to the market for family needs. However, men and women agree that it is not a taboo for men to engage in a number of domestic activities. For instance, when no market is available in a village, men usually take responsibility for shopping using their motorcycles, although some women do this task themselves.

Women in East Sumba also endeavour to save their assets. According to those interviewed, the additional income generated by seaweed farming is saved by both women and men. Women usually choose to manage their savings in the form of home-managed wealth such as gold, while men usually choose to buy livestock such as cattle, pigs and horses that are considered valuable and prestigious assets. Ordinary family decisions are made through deliberations between women and men. In interviews and FGDs, male groups acknowledged that women should have rights over the income that they generate, and many women thought that the additional income should be spent on family needs.

The introduction of technology and provision of training on seaweed cultivation, harvesting, processing and marketing by FAO have helped to significantly ease women's work burdens. However, deeper insight is required to measure the potential burden for women vis-à-vis their existing domestic work. The Assessment found that many women were also generating alternative incomes through seaweed cultivation; they processed the seaweed into snacks that they packaged, labelled and sold to the outer regions of the village, including to the capital of East Sumba. Currently, there are no commercially processed food products from seaweed in East Sumba. This potential market identified by women villagers needs to be supported. So far, FAO has helped to open up options for productive activities using seaweed. Yet a major challenge lies in maintaining continuity since marketing is still dependent on individual orders. Additionally, the sustainability of production mostly relies on a single person, i.e. the group leader.

Separate groupings of men and women in FAO activities could facilitate the identification of the specific needs of women while minimizing the potential for male dominance and bias. Men feel biased when women are involved in group activities that might interfere with their household chores. As childcare continues to be the responsibility of women, men are less likely understand what is expected from them. Among the Assessment's findings is the fact that women seaweed farmers tend to rely less on their husbands in terms of income and feel sufficiently secure in meeting their own needs, especially when there is an emergency and their husband is not in the village.

The village economy is driven by the household economy of the fishermen. Though women are engaged in seaweed cultivation and processing, their contributions to village economic development have not been measured quantitatively. It is clear, however, that women now have more opportunities and are increasingly being taken into account in village community dialogues. In any case, present prospects for seaweed cultivation and processing have encouraged the district government to invest in these areas as a rural development strategy. The village government sees seaweed farming as a catalyst for the overall development of the village, while village authorities increasingly demand more innovative technology and procedures.

Men's groups have received some specific training. It is recommended that the same training is offered to women, though to a limited number. It is true that women have been provided with seaweed processing skills training, however, there is no written report containing any gender-disaggregated data on the issue of such training.

It is also recommended to address the issue of sustainability, as observed in groups managed by men and women. Also, it is necessary to ensure that women and men have equal access to available resources. The East Sumba government does not have disaggregated data on the marine and fisheries sector to offer appropriate guidelines for both women and men.

Given the demands and requirements of seaweed cultivation and processing, providing appropriate support for this abundant and inexpensive local food source is important. So far, the village has established a cooperative that is in the process of being expanded into one of the BUMDes units. BUMDes is a national policy aimed at strengthening the capacity of villages in line with the mandate of the Village Law. This mechanism aims to support the economic potential of local communities through enterprises managed by villagers.

It is noteworthy that intervention on women's potential in financial management remains an uncharted area. For example, the PNPM programme showed that women are the group with the highest potential in managing finances, as they tend to be more trustworthy and conscientious. However, the community groups are far from having sufficient access to information and financial services. On the other hand, the FAO-supported effort to strengthen women's groups has still a long way to go in pioneering the formation of business capital (financial) members.

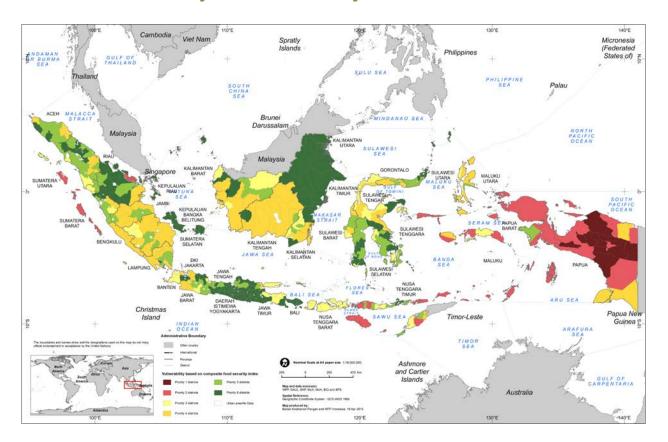
It is worth recalling that neither baseline sex-disaggregated data collection nor a gender analysis was conducted prior to or during the design of the programme to make a profile of men and women in the community and to assess their situations in the process of seaweed cultivation. Yet, as soon as the intervention started, women were involved in the programme and their contributions were acknowledged.

The FAO programme intervention in East Sumba has opened the opportunity for women to earn more income for themselves and their families through involvement in productive activities in seaweed farming and processing. Investing in women through training in farming technology and processing has significantly contributed to their ability to generate an alternative income. Women work in groups, not just for income generation but also as a platform for sharing experiences and gathering ideas and proposals to raise in village development planning dialogues. Using a seasonal calendar, women and men identified several sources of income. Seaweed farming and processing have been identified as having important income-generating potential, if market access and good prices are secured. Another important factor is time allocation for productive work. Opportunities in seaweed cultivation and processing have influenced women's decisions on whether to migrate from their villages to work as domestic workers elsewhere; now, more are opting to stay in their villages. Women and men have equal access to involvement in sub-village development discussions. However, in general, women tend to have limited access to involvement in village and higher-level social dialogues on development planning, due to constraints in time and mobility. Yet, a limited number of women make a point of being involved in meetings on development planning to ensure their ideas and proposals are part of the discussion and get approved by the community.

Despite the opportunity for broader involvement of women in village-level development, particularly in the economic sector, there are still certain obstacles. It is believed that due to the limited commitment to and resource allocation for gender mainstreaming efforts by the regency government offices, challenges persist. Although numerous national policies have been developed for gender mainstreaming implementation, there is a large gap in knowledge, skills and available resources from the national to the sub-national levels, as can be seen at the regency level. In many cases, integration of gender concerns into programmes have been driven by external projects of international institutions that somehow included indicators for measuring gender equality and women's empowerment achievements.

It would be useful to organize women into separate groups in order to effectively reach them for empowerment. In such groups, women could voice their aspirations more freely. The programme can include lessons learned in East Sumba to design activities that address current gaps in information and analysis from a gender perspective and develop strategies to reduce gender inequalities in seaweed cultivation.

Annex 2: Vulnerability to food insecurity (2015)



Source: WFP Food Security and Vulnerability Atlas of Indonesia

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