

COMCEC AGRICULTURE OUTLOOK 2022



**COMCEC COORDINATION OFFICE
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**Standing Committee
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of the Organization of Islamic Cooperation (COMCEC)**

COMCEC

AGRICULTURE OUTLOOK 2022

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Preface

COMCEC Strategy adopted during the 4th Extraordinary Islamic Summit held in Makkah Al-Mukarramah on 14-15 August 2012, envisages Working Group Meetings as one of the instruments for its implementation. Through the Working Groups, experts from the member countries get the chance of elaborating the issues thoroughly in the respective cooperation areas and sharing their good practices, views and experiences. The Working Groups are established for each cooperation area defined by the Strategy, namely Trade, Transport and Communication, Tourism, Agriculture, Poverty Alleviation, and Finance.

The COMCEC Outlooks are prepared in each cooperation area of the Strategy with a view to exploring the global trends and current situation in the COMCEC in the respective areas and to enrich discussions during the Working Groups Meetings by providing up-to-date data and analysis.

This COMCEC Agriculture Outlook 2022 is revised and updated by Prof. Dr. Erdogan Gunes (Ankara University Faculty of Agriculture, Agricultural Economics Dept., Türkiye) Consultant for the Agriculture Working Group to the COMCEC Coordination Office with the objective of providing general information on the status of the agricultural sector in the Member States. It aims to be a frequently referred handbook for decision makers and other users; to identify the relationships between agriculture and agro food industry and other sectors; to be a source for monitoring and evaluation of current agricultural policies and to assist in formulation of better policies in the Member Countries by combining various data and statistics published or compiled by different institutions. This document also dwells on the major issues with regards to agricultural sector development and provides comparisons for different country groupings to expose the situation in the Member States and thus the cooperation potential.

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Acronyms and Abbreviations

AWG	Agriculture Working Group
COMCEC	The Standing Committee for Economic and Commercial Cooperation of the Organization of Islamic Cooperation
EIU	Economist Intelligent Unit
EI	Exposure Index
FAO	Food and Agriculture Organization
FIES	Food Insecurity Experience Scale
FLW	Food Loss and Waste
GDP	Gross Domestic Product
GhGs	Greenhouse Gases
GHI	Global Hunger Index
GNI	Gross National Income
IFPRI	International Food Policy Research Institute
ILO	International Labor Organization
km ³	Cubic Kilometer
LDC	Least Developed Countries
LIFDC	Low-income Food-deficit Countries
LMICs	Low-and Lower-Middle-Income Countries
m ³	Cubic Meter
OECD	Organization for Economic Co-operation and Development
OIC	Organization of Islamic Cooperation
TRADEMAP	Trade Data Repository developed by International Trade Center of UNCTAD/WTO
UN	United Nations
WTO	World Trade Organization

Introduction

The world has been undergoing a rapid economic and technological transformation in recent years. In this process, in addition to increasing health and pandemic problems, drought and product cost increases due to climate change, hunger problems and wars and migrations are experiencing major problems. This process is particularly acute in countries with low income levels. Recently, the impacts of the COVID-19 pandemic on global agricultural and food systems have become increasingly apparent in 2021. It has shifted from being a global health crisis to a global food crisis. Maintaining sustainability of food supply chains (SFSCs) under COVID 19 is one of the top priorities of OIC and is also linked to the well-being and prosperity of its people where the global economy shrunk by 7.6% (OECD), OIC unemployment reached to 53.3 million, export/import ratio is around 65% against OIC trade deficits in agriculture. Additionally, 28 OIC countries are among the world's 54 low-income food-deficit countries (LIFDCs), have population growth (25%) surpassing their GDP growth (10%), 22 OIC member states exist out of 47 globally as LDC and close to 30% of undernourished people in the world reside in OIC.

An important issue in the food sector in recent years has been the continued rise in global prices. In this process, price increases have reached the highest level in history as a result of rising costs (production and transportation cost increases due to the impact of oil prices), climate change and the imbalance between food supply and demand caused by various regional problems. Meanwhile, global food prices have risen continuously since 2020, when the Covid-19 pandemic took hold, accelerating the rise of inflation in economies. Accordingly, inflation has been rising not only in Turkey, but also in many developed countries, with inflation at the highest rates in recent years (e.g. 5.3% in the US, 4.1% in Germany, 3.4% on average in the Euro area). The evolution of global food price increases shows that the price index has reached its highest value in recent years. In February 2022, it reached a record high of 138.0%¹.

Various studies show that underdeveloped countries are particularly adversely affected by the rising food price index. According to FAO records, the fact that nearly 850 million people suffering from hunger and nearly as many malnourished people are affected by this negative change creates injustices in ensuring the global nutrition order. This phenomenon is likely to increase gradually².

COVID-19, especially in recent times, has also disrupted the global food system and increased its structural inequality, from unequal food distribution to global lockdowns and starvation of workers in the food system. Eventually COVID-19 pandemic added an additional 83 to 132 million people to the ranks of the undernourished in 2020. It has become evident that a post-COVID-19 era has started where this global health and economic crisis will have impacts for the years to come. The cost of a healthy diet exceeded the international poverty line, making it unaffordable for the poor. The cost also exceeded average food expenditures in most countries in the Global South: around 57 percent or more of the population cannot afford a healthy diet throughout sub-Saharan Africa and Southern Asia where this is critical for most OIC member states.

The low income OIC countries are the most susceptible to demand-side transmission of the

¹ Artık, N., Güneş, E., Mert, İ. 2022. Turkish Food and Beverage Industry Sector Research, Tugis Press.

² Artık, age. 2022.

pandemic. Almost 70% of the OIC countries have intermediate-high to high levels of risks in terms of demand-side transmissions. In contrast, only 10% have a low risk of exposure to the demand side. Overall, economic and income contraction amid the COVID-19 control measures would increase the poor population thereby putting more people under a food-insecure state. In order to minimize the negative impacts of COVID-19 OIC Member Countries kept the agri-food value chain functioning and protected the most vulnerable populations by ensuring the sustainability of their food supply chains as much as possible. In terms of Intra-OIC cooperation level, the turbulence created by COVID-19 also created opportunities under crises for the OIC member countries to strengthen their existing potential for cooperation with each other. In this period, rapprochement and cooperation between countries has been very important. It is necessary to improve cooperation among OIC countries, especially in reducing the negative impact of increasing trade costs on countries.

Agriculture is one of the leading sectors in most OIC member countries, contributing to income, employment and trade. OIC agricultural gross domestic product (GDP) reached USD 673 billion in 2019, accounting for 19 % of world agricultural production. Moreover, the number of people employed in the agricultural sector in OIC Member Countries reached 212 million in this year, accounting for 23.9 % of the world agricultural employment. In the 2015-2019 period, the number of people employed in agriculture increased by close to 1%, reaching 212 million people. Most OIC Member Countries run trade deficits in agriculture, with a trade deficit of USD 86.2 billion in the OIC as of 2020 and an export/import ratio of about 62.8%, with most OIC Member Countries continuing to run trade deficits in agriculture. Therefore, the agriculture sector is critical for many OIC member countries to generate income, increase welfare, and eradicate extreme poverty and hunger, especially under the impact of COVID 19.

This report highlights the state-of-the-art of the agricultural sector by analyzing macro agricultural indicators, sectoral indicators and the state of food security in OIC member countries at a time when the impact of COVID 19 is gradually waning and its effects are partially ongoing. Agricultural value added, growth, population, employment, trade, resource use, production, productivity and selected dimensions of food security in the OIC member countries are presented and analyzed in this outlook. The report also dwells on the cooperation efforts under the Standing Committee for Economic and Commercial Cooperation of the Organization of Islamic Cooperation (COMCEC).

OIC member countries are analyzed in three groups: African Group, Arab Group and Asian Group. Furthermore, for more detailed analysis, agriculture sector trends in the OIC member countries are compared with the world trends. Updated key figures and tables created by using most recent data from various international organizations are presented with the aim of enriching the understanding of the state of agriculture sector in the OIC. Finally, the chapter titled 'Transformation of Food Systems and global changes after COVID-19' has been expanded. Contributions have also been made to the section on 'Impacts on Agriculture and developments in the OIC after COVID-19'.

1. Macro Agricultural Indicators

Macro agricultural indicators provide an overview of agricultural sector in an economy. They present the bigger picture and show the overall agricultural performance in a country. They can also be used to compare the performances of individual or groups of countries over time, among themselves, or with the rest of the world.

The value of total agricultural output, the share of agricultural production in an economy, the growth rate of the sector, agricultural population, and contribution of agricultural sector to total employment, the share of agriculture in total exports and imports, and export/import ratios are useful macro indicators to assess the role and performance of agriculture in OIC member countries.

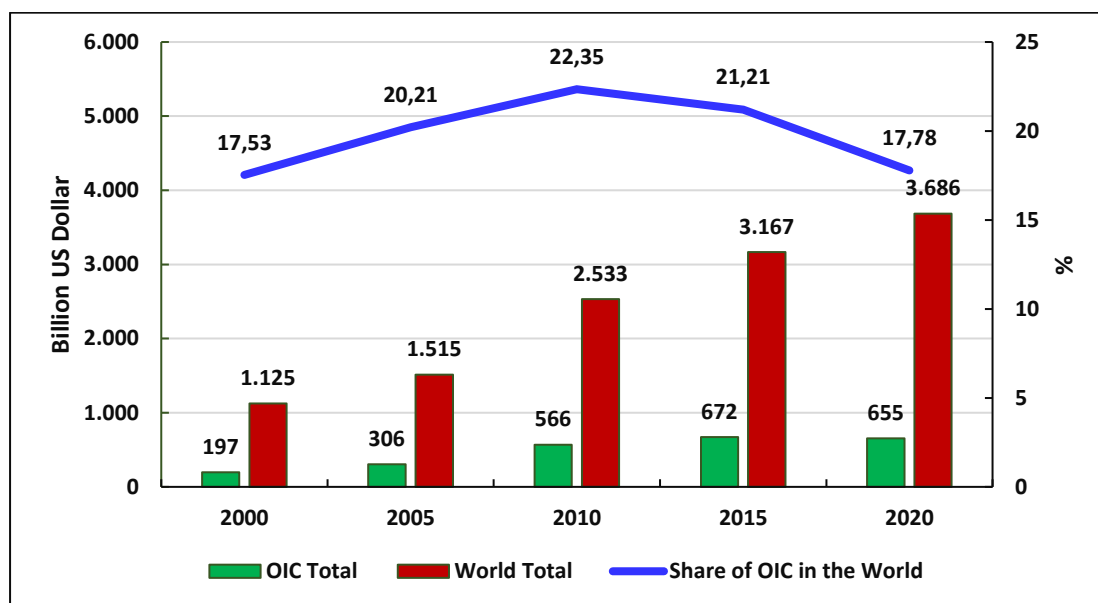
1.1 Agricultural Value Added

The agriculture sector in developing countries is one of the leading sectors in terms of its contributions to income. It is also the most effective sector in generating income for the poorest segment of the population, and hence of crucial importance for their welfare³. Suitability of ecological conditions, availability of natural resources, human capacity to carry out agricultural activities, and existence of production and marketing infrastructures play a crucial role in generating agricultural output and income. Agricultural sector is of critical importance for many OIC member countries; especially for the LDCs. The level of dependence on agriculture of overall economic growth is very high in many of the Member Countries.

The significance of agriculture in national economies varies extensively. While in many least developed countries, agriculture accounts for more than 50 percent of GDP, in many high-income economies such as the members of Organization for Economic Cooperation and Development (OECD), agriculture constitutes less than 1.5 percent of overall economic output. Thus, the role of agriculture in overall economic growth will vary from country to country, and in general, agriculture is more important in poorer countries. In other words, in the least developed countries, one of the major drivers of overall economic growth is agriculture. This is largely due to higher income elasticity of demand for non-agricultural goods and services. As their incomes grow, consumers increase their consumption of manufactured goods and services faster than their consumption of agricultural goods⁴. In line with the theory of economic development, this characteristic of agriculture can be clearly observed in the OIC as a whole.

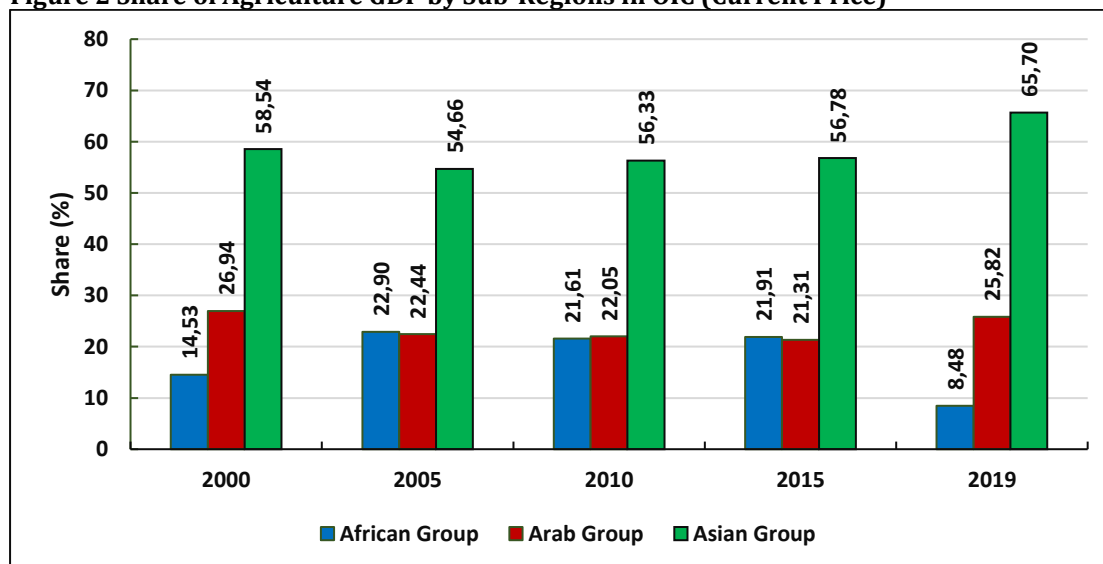
³ COMCEC, 2012.

⁴ Cervantes-Godoy and Dewbre.

Figure 1 OIC Agricultural GDP and Its Share in the World

Source: Annex 2

The values of agricultural production in the OIC member countries have increased in the last decades due to increases in production as well as higher prices. Figure 1 shows agricultural sector's contribution to GDP and its share in the world's agricultural production. In 2000, OIC agricultural GDP was 197 billion US Dollars with a share of 17.5 percent in the world's agricultural production. In 2020, OIC agricultural GDP reached 655 billion US Dollars with a share of 17.8 percent in the world's agricultural production.

Figure 2 Share of Agriculture GDP by Sub-Regions in OIC (Current Price)

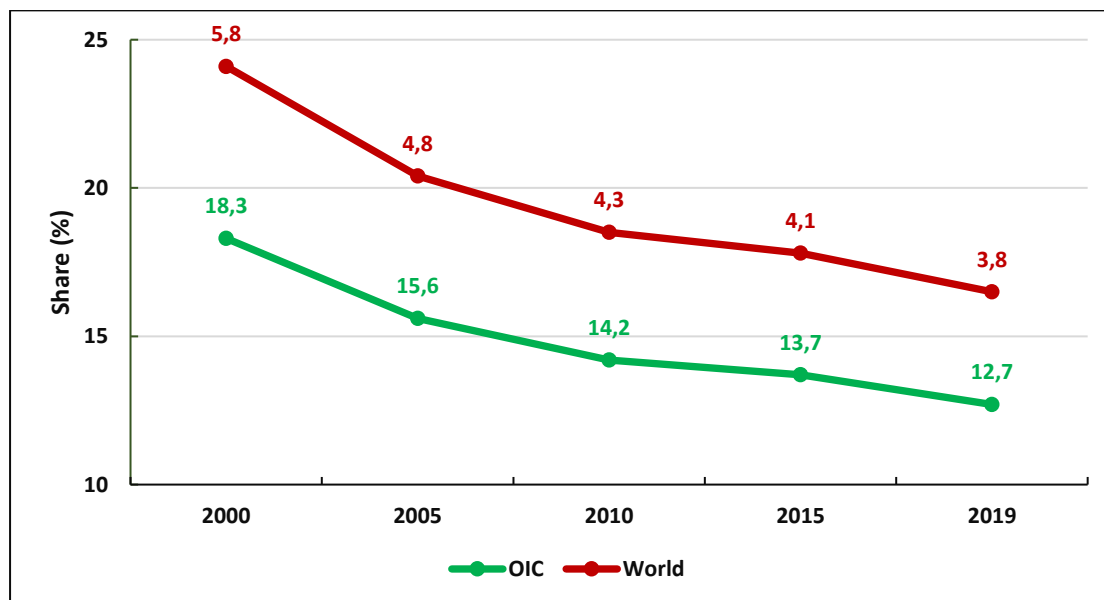
Source: Annex 3

The OIC member countries are classified into 3 groups as African, Arab and Asian group. The

contribution to these groups to the OIC total agricultural value added varies considerably, and it shows an uneven pattern over time. The relative performance of Asian Group is getting strong compared to the Arab and African Groups in the period of 2000-2019. Also, Asian Group has the highest contribution to agricultural production over the years.

As of 2019, OIC agricultural GDP reached to 673 billion US Dollars and the contribution of Asian group to this value is 392 billion US Dollars which is more than half of the total agricultural GDP of the OIC Member Countries. Hence, Asian Group has the highest amount of the agricultural GDP, and followed by African and Arab Group with almost 163 and 118 billion US Dollars, respectively. From 2000 to 2019, the share of African group agricultural GDP in OIC agricultural GDP increased to 8,48percent from 14,53 percent. On the other hand, the share of Arab Group agricultural GDP in OIC agricultural GDP stayed almost the same with 26,94 percent in 2000 and 25,82 percent in 2019. Share of Asian group increased from 58,54 to 65,70 percent in the same period.

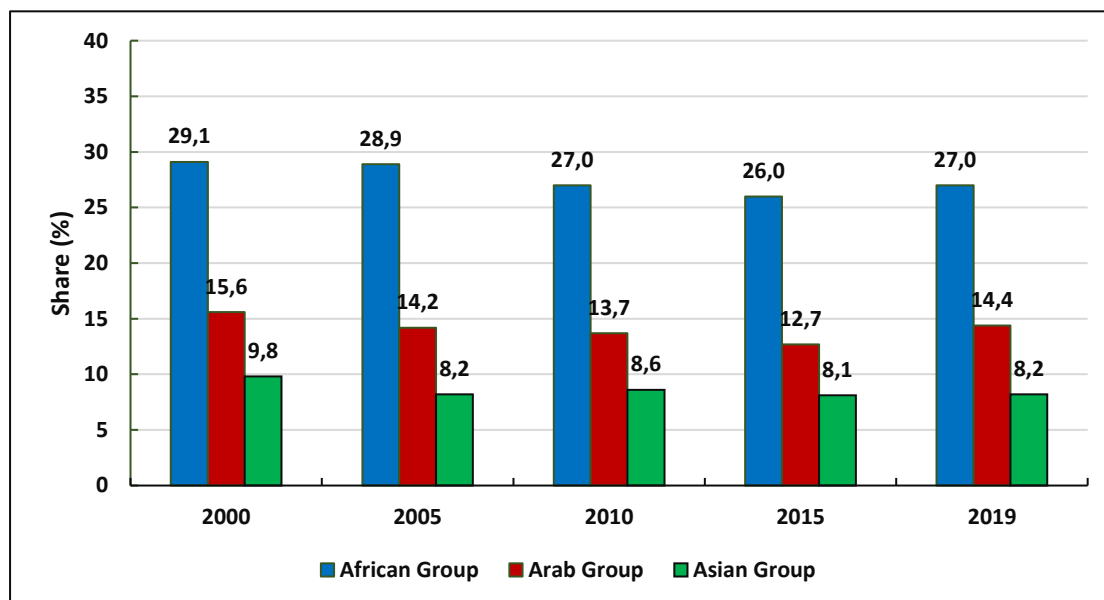
Figure 3 Share of Agricultural GDP in the OIC and World



Source: Annexes 2-6

During the last decades, agriculture activity in most of the OIC member countries has gradually been replaced by services and industrial activity leading to decrease in the share of agriculture sector of OIC member countries to their total GDP.

Figure 3 illustrates that at 2000, the share of agricultural sector in OIC member countries in total GDP was around 18.3 percent, decreased to 14.2 percent in the following decade. From 2005 to 2010, the increase in the share of agricultural sector in OIC member countries' total GDP decreased from 15.6 to 14.2. As of 2019, it decreased to 12.7 percent which is the lowest value in the share of agriculture in the world's total GDP in the last 20 years. This demonstrates a progressive converging to the low-level share of agricultural contribution to the GDP in the OIC region.

Figure 4 Share of Agricultural GDP in Total GDP by Sub-Regions

Source: Annexes 2-6

The share of agriculture sector in total GDP varies significantly across regions in the OIC (Figure 4). African Group has the highest share of agricultural GDP, with 27.0 percent in 2019. It is followed by Asian and Arab groups with 14.4 percent and 8.2 percent, respectively. Even though the relative contribution of agricultural activity to the economy has shown fluctuations around the same values in African Countries, it registered a decreasing path in both Arab and Asian Countries in the last 25 years.

Table 1 illustrates the top 10 OIC member countries with respect to agricultural value added and share of agricultural sector in their economies in 2015 and 2019. Indonesia has the highest value-added agriculture in the OIC with 142.3.2 billion US Dollars, which accounted for the 21.14 percent of total GDP in 2019. Nigeria was the second country with 98.2 billion US Dollars and its agricultural GDP constituted 14.59 percent of the total GDP. In 2019, top ten countries produced 519.5 billion US Dollars of agricultural GDP, which was more than 77 percent of total agricultural GDP of 57 OIC member countries.

The importance of agricultural sector in the top ten member countries differs across countries. For instance, in 2019 the share of agricultural GDP in country's total GDP was the highest in Indonesia with 21,14 percent. In the top ten country rankings, Indonesia was the only country whose shares of agriculture sector in the economy were higher than 20 percent in 2019.

Table 1 Agricultural GDP Rankings in the OIC

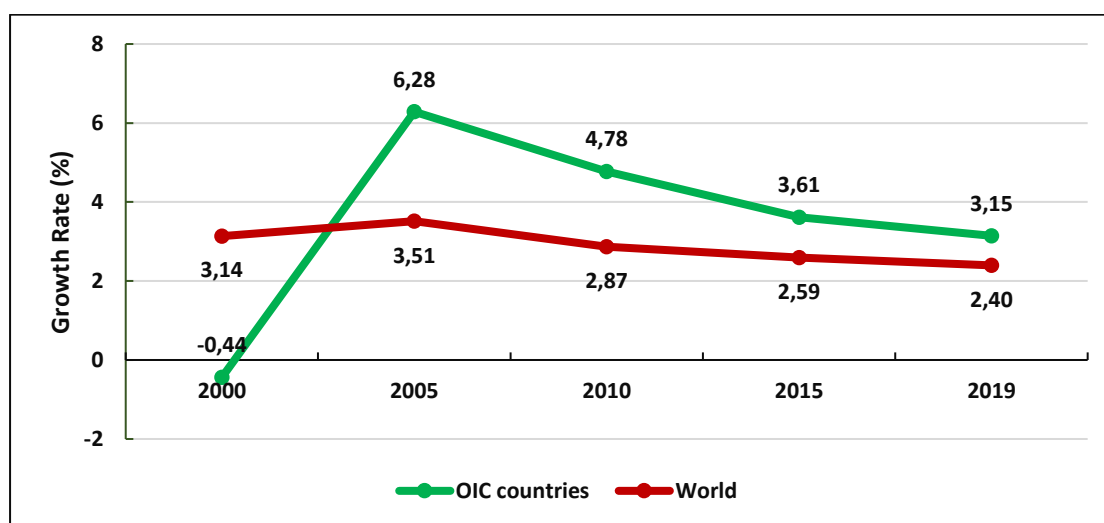
	2015			2019		
	Agricultural GDP (Billion Dollar)		Share of Agri. in GDP in OIC, %	Agricultural GDP (Billion Dollar)		Share of Agri. in GDP in OIC, %
1	Indonesia	116,2	17,29	Indonesia	142,3	21,14
2	Nigeria	100,4	16,25	Nigeria	98,2	14,59
3	Pakistan	64,4	10,43	Pakistan	61,3	9,11
4	Türkiye	59,4	9,62	Türkiye	48,9	7,26
5	Iran	40,4	6,54	Bangladesh	38,4	5,70
6	Egypt	37,5	6,07	Egypt	33,5	4,98
7	Bangladesh	28,8	4,66	Iran	31,5	4,68
8	Uzbekistan	25,2	4,08	Malaysia	26,5	3,94
9	Malaysia	25,0	4,05	Algeria	21,2	3,15
10	Sudan	20,8	3,37	Saudi Arabia	17,7	2,63
Top Ten Total		518,10	77,13%	Top Ten Total	519,5	77,17%
OIC Total		671,7	21,21%	OIC Total	673,2	19,09%
World		3166,9		World	3526,8	

Source: Annexes 2-6

1.2 Agricultural Growth Rates

The growth rate can be calculated as nominal or real growth, and can be used to measure the performance of economies as a whole or particular sector during selected time intervals. Since the agricultural sector heavily depends on external factors such as rainfall, temperature, climate change, humidity and soil condition; the real growth rates, adjusted for price effects have shown fluctuating path over the years.

In Figure 5, it can be seen that yearly agricultural growths in the OIC have registered sharp ups and downs during the period of 2000-2019. It can be deduced that natural conditions may have caused these fluctuating patterns. This unsteady pattern of growth rates closely complies with the fluctuations in the world's agricultural growths. This means that almost same factors have influenced the growth of agriculture sector in the OIC and in the world.

Figure 5 Agricultural Growths in the OIC and World

Source: Annexes 2-6

The average annual agricultural growth in the OIC decreased slightly from 4.25 percent in 1999-2005 to 3.57 percent in 2005-2014 period. Although average yearly agricultural growth in the OIC was higher than the world in both decades, it lagged behind overall economic growth rates in the OIC. In the last 25 years, OIC's both agricultural and overall growth rates, realized as 3.90 percent and 4.34 percent respectively, surpassed the world (Table 2).

Table 2 Comparison of Agricultural Growth and Overall Growth in the OIC & the World

Period	OIC		World	
	Agr. Growth	Economic Growth	Agr. Growth	Economic Growth
(1995-2004)	4.25	4.43	2.66	3.18
(2005-2014)	3.57	4.87	2.84	2.83
(1995-2019)	3.90	4.34	2.71	2.97

Source: Annexes 2-6

Table 3 presents the sub-regional average yearly overall and agricultural growths in 10-year periods within the last two decades in OIC member countries. African Group's average yearly agricultural growth was the highest in the periods of 1995-2004 a 4.30 percent value. The lowest growth in agriculture was observed in the Asian Group with 3.22 percent in 2005-2014 period.

Table 3 Comparison of Agricultural and Overall Growth in OIC Sub-Regions

Period	African Group		Arab Group		Asian Group	
	Agr. Growth	Econ. Growth	Agr. Growth	Econ. Growth	Agr. Growth	Econ. Growth
(1995-2004)	4.30	4.47	4.28	4.65	3.31	4.56
(2005-2014)	3.91	4.83	3.36	4.94	3.22	5.41
(1995-2019)	4.12	4.59	3.73	4.54	2.81	3.18

Source: Annexes 2-6

For all three of the sub-regions, average yearly agricultural growths stayed behind their overall economic growths during the 1995-2019 period. Nevertheless, in all three sub-regions, agricultural growth rate during this period was higher compared to the world.

1.3 Population

Population in the world has reached 7.75 billion people and is projected to climb to over 9 billion by 2050. United Nations Population Funds (UNFPA) explains this dramatic growth with increasing numbers of people surviving to reproductive age which is accompanied by major changes in fertility rates, increasing urbanization and accelerating migration.

According to Food and Agriculture Organization (FAO) the total population of the OIC was about 1.91 billion in 2020. This constituted almost a quarter of the world population. Although its share in total population has been decreasing from year to year, almost half of the OIC member countries' population (42.85%) is still living in rural areas. Furthermore, 23 percent of the people living in rural areas are employed in agricultural activities.

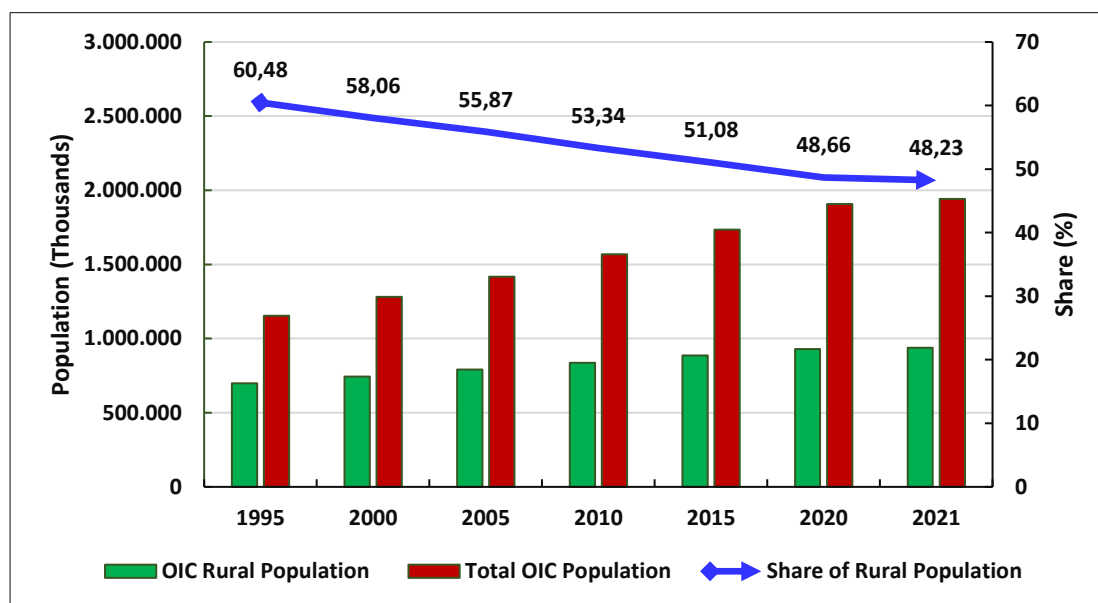
Table 4 Population Growth Rate in the OIC and in the World

Period	African Group	Arab Group	Asian Group	OIC	World
(1995-2005)	2.71	2.19	1.71	2.04	1.32
(2005-2016)	2.83	2.32	1.53	2.01	1.20
(1995-2018)	2.83	2.85	1.48	2.41	1.26

Source: Annex 7

Table 4 presents the sub-regional average yearly growths in 10-year periods within the last two decades in OIC member countries. Compared to the world, all three OIC sub-regions have experienced higher rates of population growth in the last two decades. Among the regions, African Group's average yearly population growth was the highest in the periods of 1995-2005 and 2005-2016, with 2.71 percent and 2.83 percent, respectively. Furthermore, African Group was the only group whose average yearly population growth has risen (more than two times higher than the world's population growth) during the last decade. The lowest population growth was observed in the Asian Group with 1.71 percent in 1995-2005, 1.53 percent in 2005-2016 and 1.48 percent in 1995-2018 periods.

While the rural population of the OIC member countries was 698 million people in 1995 with 60,48 percent share in total population, it increased to almost 937 million people, constituted 48,23 percent of the total OIC population in 2021. The main reason of decreasing the rural population share was that the increase in rural population was lower than the increase in total population throughout the years. This reflects that worldwide trend of urbanization is also observable for the OIC member countries, in general.

Figure 6 Share of Rural Population in the OIC

Source: Annexes 6-8

On the other hand, at the individual country level, rural population represented more than 50 percent of the total population in 24 OIC Member Countries. For instance, as of 2020, the share of people living in rural areas and engaged in agriculture was over 75 percent in some OIC Countries such as Chad and Uganda. As the majority of their population depending on agriculture for their livelihood, agriculture sector has a vital importance for the OIC Member Countries in African Group.

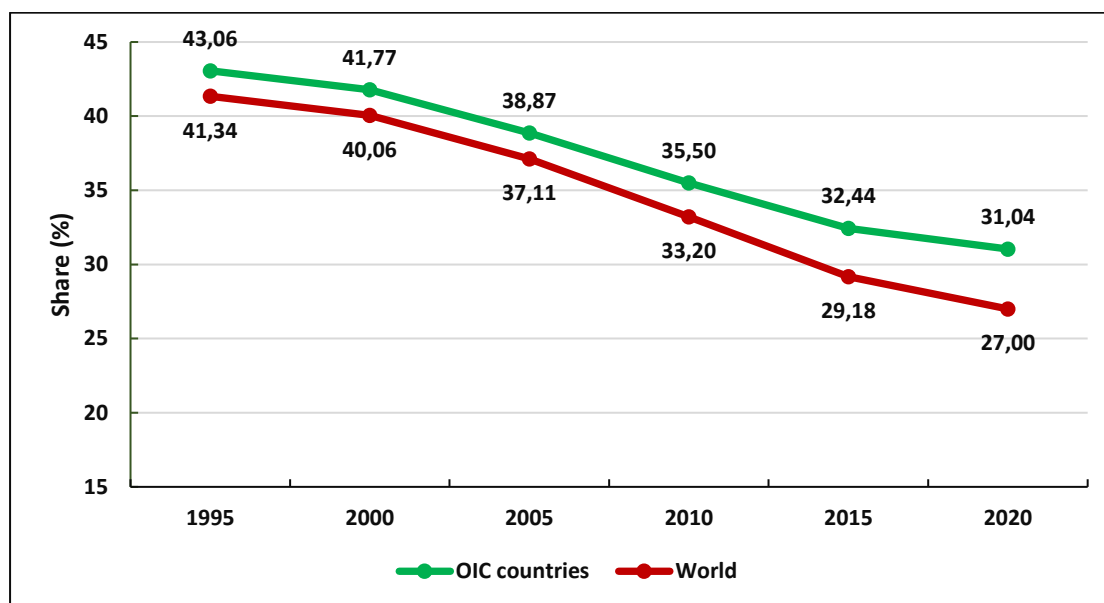
1.4 Agricultural Employment

As many of the developing countries, agriculture is one of the prominent sectors which employs significant number of workers in the OIC member countries. The number of people employed in the agricultural sector in the OIC member countries reached 212 million in 2019. This accounts for 27 percent of the world's agricultural employment.

In 2000, OIC member countries' agricultural sector employed almost 248 million people. Up to 2019, the number of people employed in agriculture decreased 36 million and reached to 212 million people (Figure 7).

In this period, both agricultural employment and the proportion employed in agriculture is decreasing over time. In 1995 agriculture accounted for almost 42 percent of total employment in the OIC, which is higher than the share of world agricultural employment. At the beginning of the 2000s, the contribution of agricultural sector to total employment decreased to around 41 and 40 percent in the OIC and the world respectively. After that, the share of agriculture in the OIC's total employment and in the World is still decreasing. In 2020, the proportion of agricultural employment is realized as 31.04 percent in the OIC and 26.86 percent in the world.

Figure 7 Share of Agricultural Employment in the OIC and World



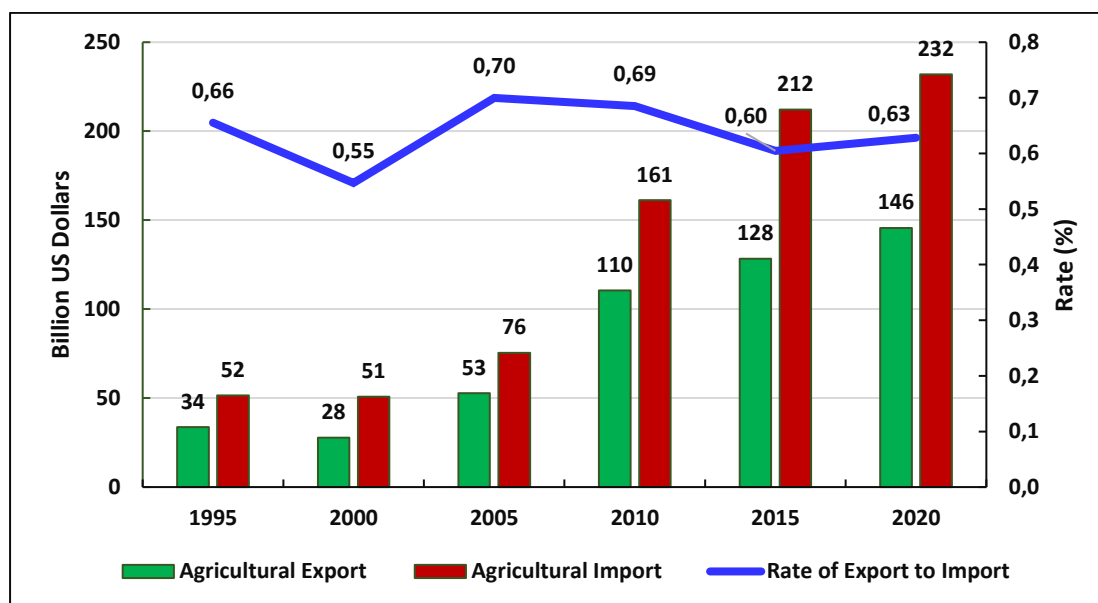
Source: Annex 10

The decline in the proportion of agricultural employment can be explained by biological, chemical, and mechanical advances eliminating many plantations, cultivation and harvesting task, increasing agricultural productivity, rapid urbanization, and non-farm activities providing an increasingly important share of rural incomes.

1.5 Agricultural Trade

This section discusses the change in the aggregate trade of the OIC member countries. Data used for the aggregates are retrieved from Trade Map which is a customized data repository tool developed by International Trade Center of UNCTAD/WTO (TRADEMAP). Unless otherwise is stated, "Total agricultural products trade" covers agricultural and food products as well as agricultural raw materials.

Agricultural commodity trade of the 57 OIC member countries increased considerably in the last decade up to 2020. Total agricultural trade in the OIC member countries grew by more than 4 times during this period and reached 232 billion US Dollars in 2020 (Figure 8). In 2020, total agricultural imports of OIC member countries reached 116 billion US Dollars, from 51 billion US Dollars in 2001. Correspondingly, total agricultural exports of OIC member countries were 146 billion US Dollars in 2020 compared to 28 billion US Dollars in 2001.

Figure 8 Agricultural Exports and Import Values of the OIC Members


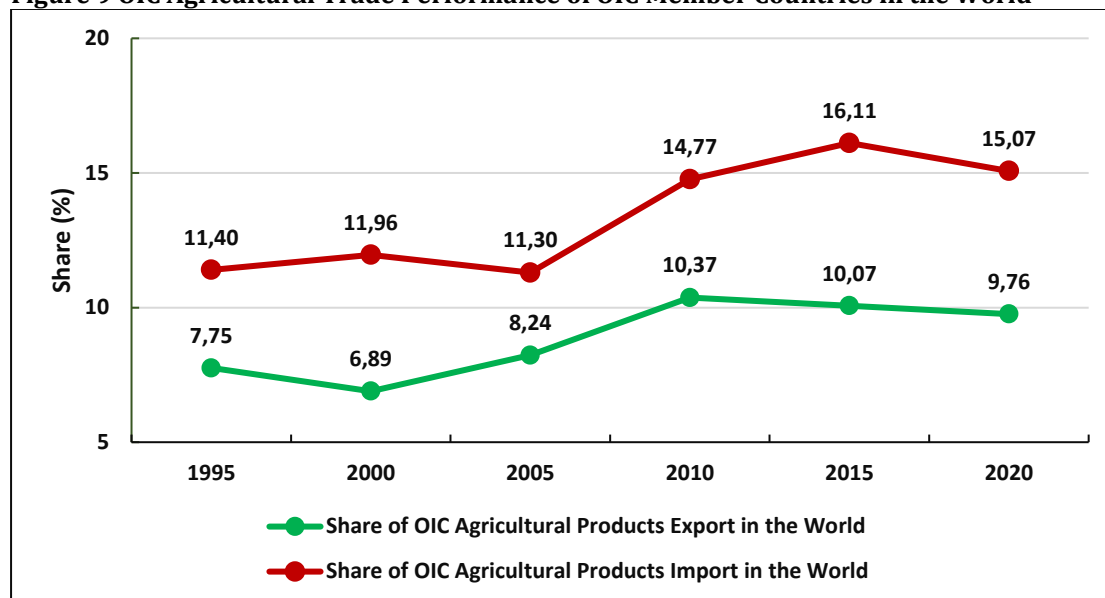
Source: Annexes 11 - 12

The export/import ratio which is a useful indicator for assessing trade performance is also shown in Figure 8. While the ratio of exports to imports was around 55 percent in 2000, it increased to almost 69 percent in 2010. However, the export/import ratio has shown a declining path around 60 percent in recent years. The poor performance of agricultural exports in 2020 negatively affected the export/import ratio, regressing it to almost back to 2015 level, 63 percent.

Figure 9 illustrates OIC's agricultural trade performance in the world. The share of OIC member countries' agricultural imports in the world increased to 15,07 percent in 2020 from 11,96 percent in 2000. Correspondingly, the contribution of OIC agricultural exports to world total agricultural export reached 9,76 percent. Both agricultural imports and exports have significantly risen in the period of 2005-2010. During the 2010-2020 period, while the share of agricultural commodity exports of the OIC Member Countries stabilized, the contribution of OIC agricultural imports to total world agricultural imports started to decline.

Most of the OIC member countries have trade deficits in agriculture. As of 2020, 86,2 billion US Dollars trade deficit occurred in the OIC. Figure 10 also illustrates the agricultural trade balance in the OIC Sub-Regions in 2020. Asian, African and Arab Groups have registered trade deficits of 0,9, 2,2 and 83,2 billion US Dollars, respectively.

Figure 9 OIC Agricultural Trade Performance of OIC Member Countries in the World

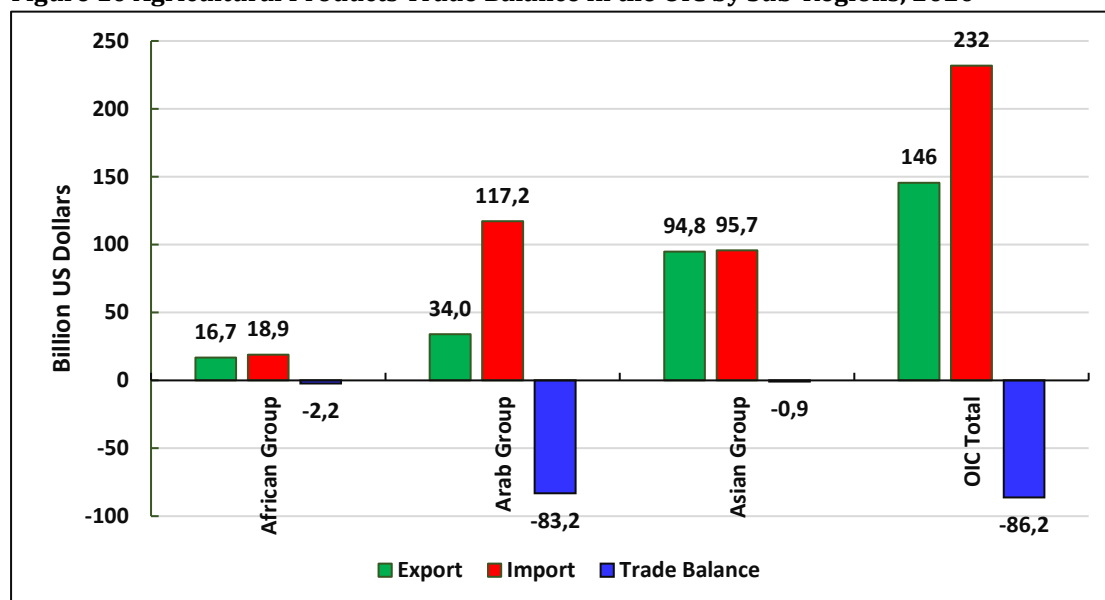


Source: Annexes 11 - 12

At the sub-regional level, Asian Group had the highest share in OIC's agricultural exports with 64,9 percent in 2020. Asian Group was followed by Arab and African Groups with 23,3percent and 118 percent respectively. In terms of agricultural imports, Arab Group accounted for 50.5 percent of the OIC's total in the same period. It was followed by Asian and African Groups with 41.2 percent and 8.3 percent, respectively (Figure 10).

The Annexes 11 and 12 illustrate the first 15 partner countries and products in the OIC's regional level exports and imports. The African Groups countries have trade networks with partner countries in the other regions with lowest intra-OIC trade share in its agricultural exports, 8.8 percent while the Arab Group and Asian Group countries has an intra-OIC trade share of 40.4 and 8.7 percent respectively. The Asian Group Countries also have a higher share of its own regional export of 36.1 percent. The same is true for the case of OIC's imports.

The product group of cereals is the top item in OIC's imports of different regional group of countries following by dairy and meat products. The OIC Regions have their regional specialty items as top export items, namely, cocoa for African, nuts for Arab and edible oils for Asian Countries.

Figure 10 Agricultural Products Trade Balance in the OIC by Sub-Regions, 2020

Source: Annexes 11 - 12

2. Sectoral Indicators

Sectoral indicators provide more specific information on the structure of a sector. For agriculture; land use, crop productions and yields, labor productivity, water use and fertilizer use are considered as the main sectoral indicators.

2.1 Land Use

The world's cultivated area has grown by 5.15 percent over the last 50 years. The global irrigated area has almost doubled over the same period, accounting for most of the net increase in cultivated land. Meanwhile, agricultural production has grown between 2.5 and 3 times, thanks to significant increase in the yield of major crops. However, global achievements in production in some regions have been associated with the degradation of land resources, and the deterioration of related ecosystem goods and services, such as decreasing biomass and carbon storage as well as damaging soil health and biodiversity.

According to FAO's 2019 data, agriculture uses 4,75 billion hectares, representing 36.5 percent of the world's land surface. Agriculture is a major user of land. Hence, in order to make agriculture sustainable, it is important to maintain the quantity and quality of soil resources. Agriculture must be at the center of any discussion on natural resource management and global environmental objectives. The responsible management of natural resources requires ensuring adequate food and water for all while at the same time achieving sustainable rural development and livelihoods for the current and future generations.

Land resources and the way they are used are central to the challenge of improving food security across the world. Demographic pressures, climate change, and the increased competition for a land are likely to increase vulnerability to food insecurity, particularly in Africa and Asia. The challenge of providing sufficient food for everyone worldwide has never been greater.

For improving nutrition and alleviating food insecurity and undernourishment, future agricultural production will have to rise faster than population growth. This will have to occur largely on existing agricultural land. Improvements will thus have to come from sustainable intensification that makes effective use of land without harming and spoiling this precious resource. As estimated by FAO, almost 5 to 7 million hectares of agricultural land are lost each year due to land degradation and urbanization.

Taking into account the issues mentioned above, for the OIC member countries sustainable land management is vital, as most of them are faced with food insecurity and have higher population growth than the world average.

Table 5 Land Use in the OIC and its Share in the World, 2019

	Total Land Area	Agricultural Area	Arable land	Permanent Crops	Permanent Meadows and Pastures
OIC (million ha)	3133	1359	314	67	978
Share in Total Agr. Area (%)		100.0	23.1	4.9	72.0
World (million ha)	13030	4752	1383	170	3196
Share of OIC in the World (%)	24.05	28.60	22.70	39.41	30.60

Source: FAOSTAT

Table 5 provides data on magnitudes of total land, agricultural land, permanent crops land and permanent meadows, and pastures in the OIC member countries as well as in the world. OIC member countries' total land area of 3.13 billion hectares, equals to 24,05 percent of the world's total land area. Almost 1.36 billion hectares, representing 43,4 percent of this total land is used as agricultural land by the OIC member countries. The OIC's agricultural area share in total land area is higher than the world average of 36,5 percent.

In the OIC, out of these 1.36 billion hectares of agricultural area, 314 million hectares are arable land, 67 million hectares are reserved for permanent crops, and around 978 million hectares are used as permanent meadows and pastures. Most of OIC member countries' agricultural area, (72.0 percent), consists of permanent meadows and pastures. This is in line with the general distribution in the world where 67 percent of agricultural area consists of permanent meadows and pastures. When compared to EU countries, where almost 60 percent of the agricultural land is arable, 31 percent consists of permanent meadows and pastures and 5 percent is allocated to permanent crops, the OIC member countries as a whole have a very high level of permanent meadows and pastures, but very low share of arable land.

Table 6 The Shares of Land Use in OIC Sub-Regions, 2019

OIC Sub-region	Land area	Agricultural Area	Arable land	Permanent Crops	Permanent Meadows and Pastures
African Group (%)	24,52	25,40	33,80	25,81	26,14
Arab Group (%)	41,75	35,18	18,46	13,04	42,09
Asian Group (%)	33,73	39,42	47,73	60,82	35,29
OIC Total (%)	100	100	100	100	100

Source: FAOSTAT

Table 6 reveals that Arab and Asian Groups constitute 35.18 and 39.42 percent of the total agricultural area of the OIC. They are followed by the African Group with 25.40 percent. Arab Group has the highest share in permanent meadows and pastures of OIC with 42.09 percent. Asian Group has the highest share in the arable and permanent crop areal with 47.73 and 60.82 percent, respectively.

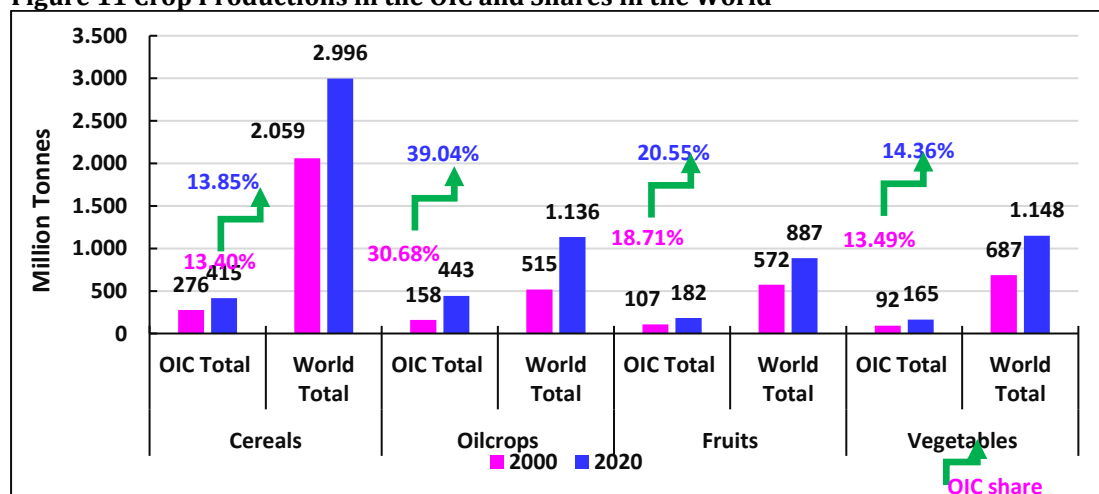
At the individual country level, Kazakhstan with 15.8 percent, Saudi Arabia with 12.8 percent, Nigeria with 5.09 percent, Sudan with 5.02 percent, and Indonesia with 4.59 percent, own significant portion of OIC's agricultural land. Regarding the arable land, the country ranking list changes slightly, and Nigeria becomes the first country which has the highest share of arable land with 10.85 percent in the OIC. Pakistan, Kazakhstan, Indonesia and Sudan are the following countries which share OIC's total arable land with 9.73 percent, 9.53 percent, 8.39 percent, and 6.32 percent, respectively. Nonetheless, most of the OIC member countries' agricultural area mainly consists of permanent meadows and pastures. (Annex 17).

2.2 Productions

The OIC member countries pursue a wide range of crop and livestock production systems as they are on different agro-ecological zones, have different agricultural infrastructures, production and consumption habits. Hence, a large variety of agricultural products are grown in the OIC.

Figure 11 shows that in terms of the volume of agriculture production, as of 2020, OIC member countries contributed 425 million tons to the world cereal production, representing 13.85 percent of the world total cereals production. Even though the cereal production increased by 45,5 percent in the period of 2000-2020, the share of OIC member countries in the world cereal production showed a very slight increase. As of 2020, 443 million tons of oil crops were produced in the OIC, compared to 158 million tons in 2000. This substantial amount of oil crops production in the OIC significantly stimulated the share of OIC member countries in the world oil crops production, which increased from 30,6 percent to 39.0 percent during the 2000-2020 period. Among the commodity groups in the OIC, oil crops have the highest share in the world.

Figure 11 Crop Productions in the OIC and Shares in the World

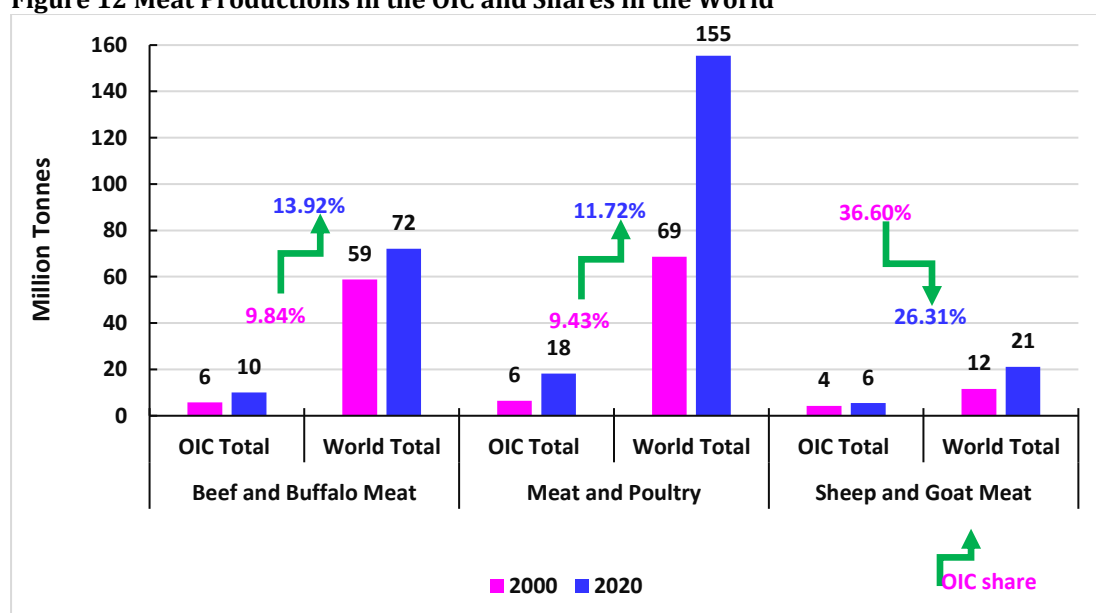


Source: Annexes 18-20

In 2020, the share of OIC member countries in the world fruit production amounted to 20,55 percent, compared to 18,71 percent in 2000. The share of OIC member countries in the world total production of vegetables were around 13,5 percent in 2000 and increased to 14,36 percent in 2020.

Figure 12 illustrates the developments in meat production in the OIC member countries and its share in the world. In 2020, 10 million tons of beef and buffalo meat was produced in the OIC as compared to 6 million tons in 2000. This noteworthy increase in beef and buffalo meat production was mainly due to supply-side factors, such as cheap inputs, technological change and scale efficiency gains in the last decade.⁵ The significant increase in beef and buffalo meat production also lead to an increase in the share of OIC member countries in the world's production, from 9.84 percent in 2000 to 13.92 percent in 2020.

Figure 12 Meat Productions in the OIC and Shares in the World



Source: Annexes 21-23

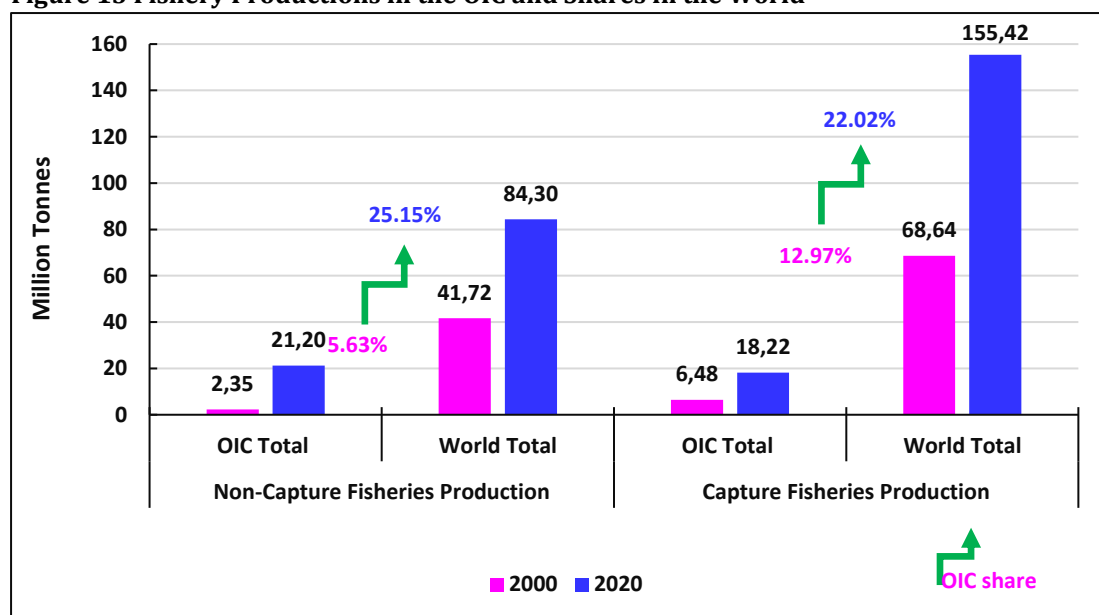
Similarly, a dramatic surge is observed in the poultry meat production during the same period. While it was 6 million tons in the beginning of the century, it almost tripled and reached 18 million tons in 2020. Likewise, the increase in the share of OIC poultry meat production in the world was dramatic, due to high rate of growth in poultry sector across the globe. The contribution of OIC member countries' meat poultry production to the world's poultry meat production slightly ascended to 11.72 percent in 2020, from 9.43 in 2000.

The fisheries production undergoes a dramatic structural change in favor of capacity increase in fish farming practices while global capture fisheries production level remains stable (Figure 13). The share of non-capture fisheries production increased from a level of 5,63 percent in 2000 to 25,15 percent in 2020 while the capture fisheries production in OIC is increased from 12,97

⁵ SESRIC, 2015.

percent in 2000 to 22.02 percent in 2020.

Figure 13 Fishery Productions in the OIC and Shares in the World



Source: FAOSTAT

2.3 Agricultural Productivity

Agricultural productivity is a broad concept which does not lend itself to a single measurement. In general terms, it is defined as the ratio of agricultural outputs to agricultural inputs. There are a wide variety of productivity measures depending on the degree and type of aggregation of outputs and inputs: single output and a single input (wheat production/wheat area), aggregate output and single input (value of crop outputs/total crop area), single output and aggregate inputs (wheat production/value of inputs), aggregate output and aggregate inputs (value of crop production/ value of inputs used in crop production). Furthermore, aggregations can be done using prices as weights but also using other indexing methodologies.

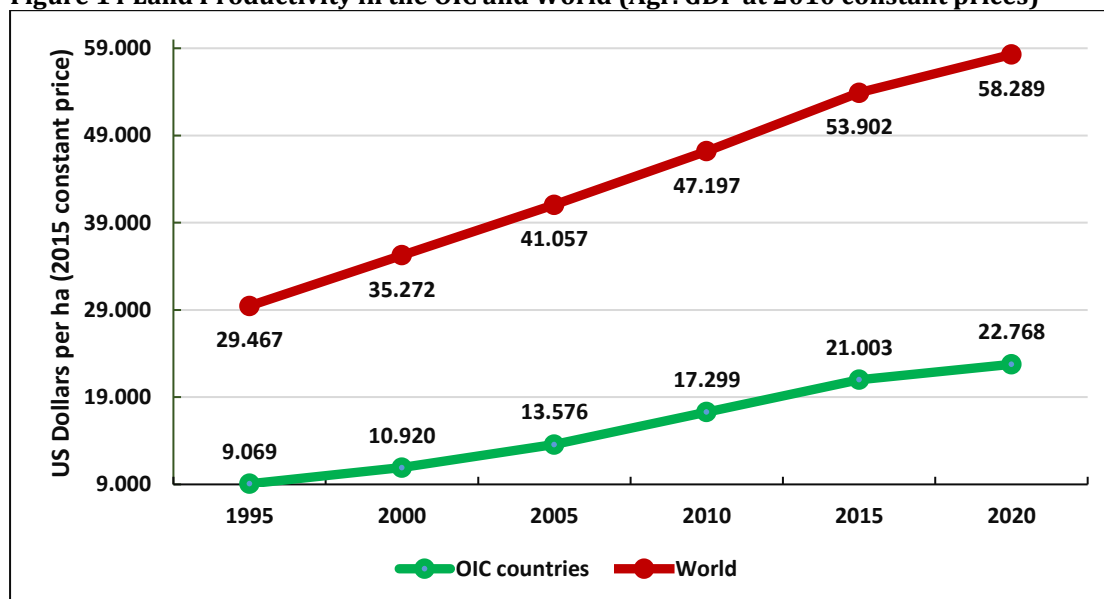
Since land and labor are the most important inputs which are used throughout the production process, below we present two aggregate productive to denote sector input use efficiency, namely, productivities of land and labor measured as the ratios of total agricultural value added to total agricultural arable land and agricultural labor respectively

Furthermore, at the product and farm level, crop yields are other commonly used measurements of agricultural productivity. They are measured by the ratio of crop output to cultivated area. Crop yields for several agricultural products important for the OIC, namely wheat, cotton and maize are also presented.

2.3.1 Land Productivity

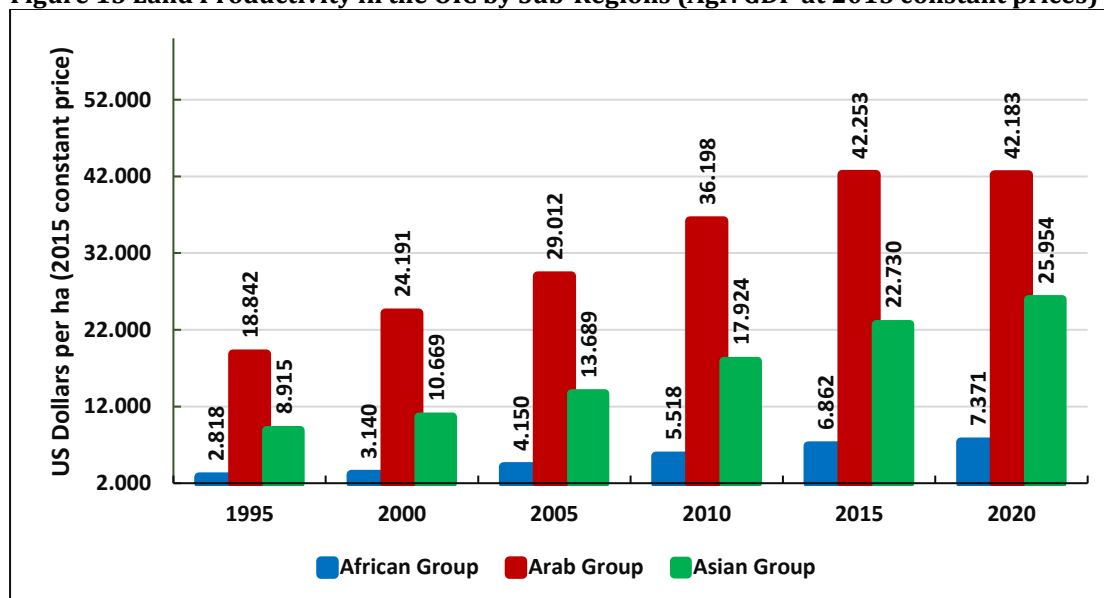
Agricultural land productivity is measured by the ratio of total agricultural value added to the arable area in a country. Therefore, it shows the agricultural value added per hectare of arable land. Figure 14 illustrates agricultural land productivity in the OIC and in the World during the period 1995-2020 using the real agricultural GDP at 2010 prices.

Figure 14 Land Productivity in the OIC and World (Agr. GDP at 2010 constant prices)



Source: Annex 27

In 2020, average agricultural land productivity of OIC member countries reached to 22.768 US dollars/ha, from 9.069 US dollars/ha in 1995. Compared to the world, the rate of growth in agricultural land productivity in OIC member countries was higher than the world. During the period 1995-2020, agricultural land productivity of the world increased by 251 percent, compared to 197 percent in the OIC member countries. The significant rates of growth in both OIC and the World realized between the period 1995 and 2020, can be explained by dramatic increases in real agricultural values added, while arable land areas remained almost the same.

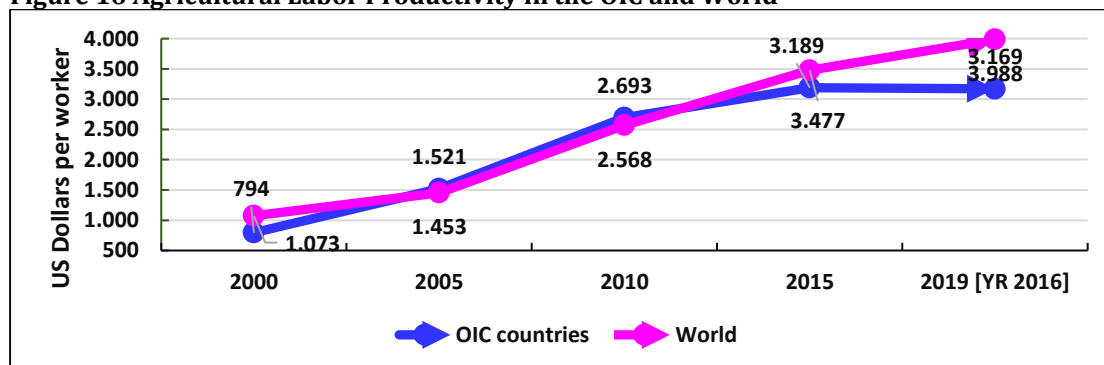
Figure 15 Land Productivity in the OIC by Sub-Regions (Agr. GDP at 2015 constant prices)

Source: Annex 27

At the sub-regional level, Arab Group had the highest level of agricultural land productivity in the OIC with 42.183 US Dollars per hectare in 2020 (Figure 15). The Asian Group was followed by Arab Group with 25.954 US Dollars per hectare in 2020. The low level of arable land in the Arab Group (one third of Asian Group and half of African Group), results in its land productivity to be relatively high, even though it's agricultural GDP is the lowest among the OIC sub-regions. Among the three sub- regions, African Group had the lowest level of agricultural land productivity during the period 1995-2020. (Figure 15).

2.3.2 Labor Productivity

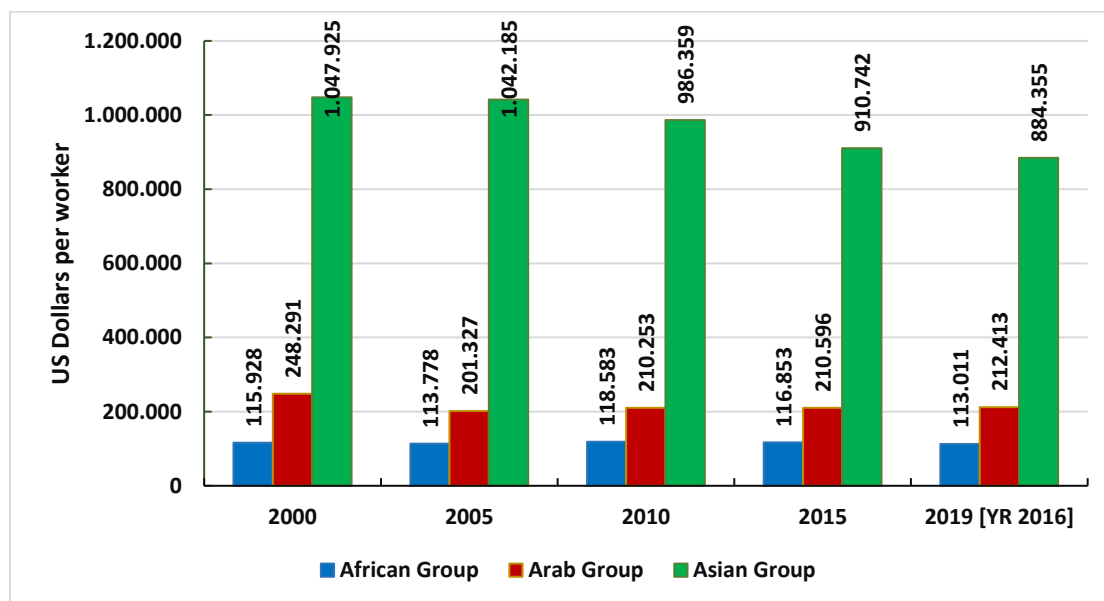
Agricultural labor productivity is measured by the ratio of total agricultural value added to the number of agricultural employments. Hence, it tells the average performance of total labor employed in agriculture sector. Figure 16 shows the agricultural labor productivity in the OIC and in the World between 2000 and 2019 using real agricultural GDP at 2010 prices as the measure of agricultural value added.

Figure 16 Agricultural Labor Productivity in the OIC and World

Source: Annex 28

Labor productivity is started to be below the world average in the OIC in 2000. In 2019, average agricultural labor productivity of OIC member countries reached 3,169 US dollars/person, compared to 1,073 US dollars/person in 2000.

Figure 17 Agricultural Labor Productivity in the OIC by Sub-Regions



Source: Annex 28

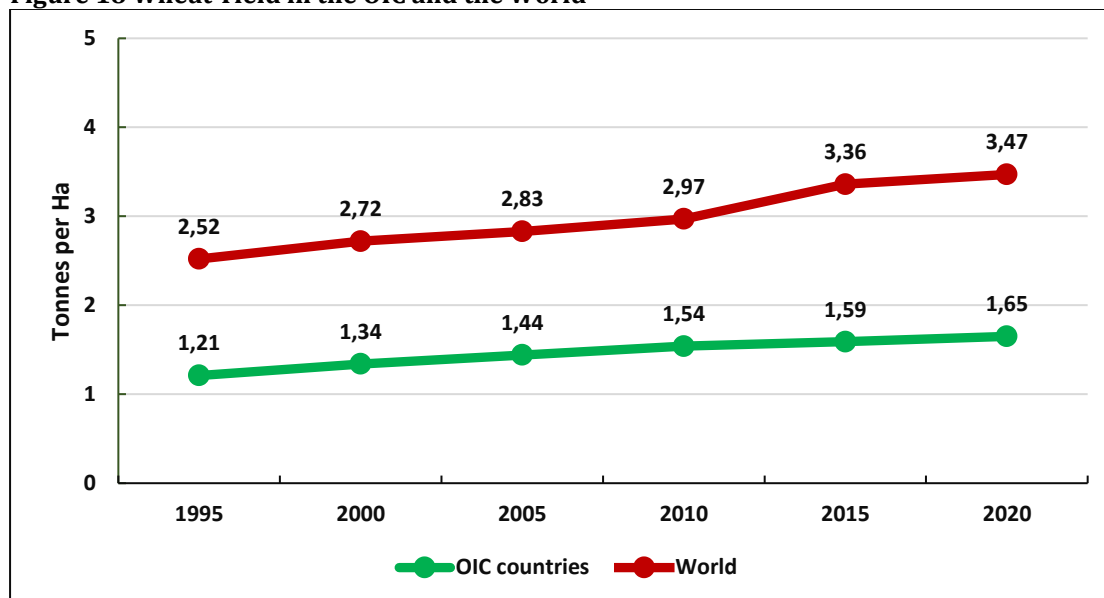
On the other hand, as shown in Figure 17, labor productivity in Asian countries is higher than other country groups.

2.3.3 Crop Yields

Another common indicator for analyzing agricultural productivity is crop yields. Even crop yields can be calculated for each agricultural product, it should suffice to present improvements in the most common, important and strategic crops. Therefore, wheat, maize and cotton seed which play crucial roles in the OIC production, consumption and trade are selected in order to analyze the crop yields in this study.

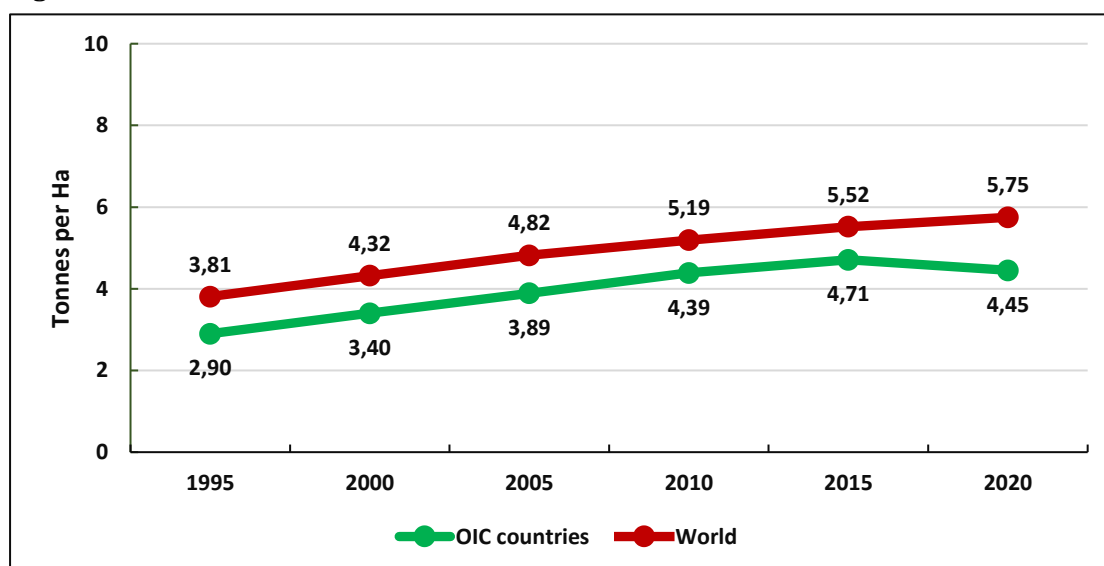
Figure 18 shows the yield of wheat, which is one of the most common cultivated products in the OIC. In 2020, average wheat yield of OIC member countries reached 1.65 tons/hectare, from 1.21 tons/hectare in 1995. Wheat yield increased in general both in the OIC and in the world during the last two decades. As of 2020, World average wheat yield was 100 percent higher than OIC.

Another key crop for OIC member countries is maize which is used for both human consumption and livestock feed. It is considered as a staple food with a high nutritional value for many millions of people in developing countries, especially sub-Saharan Africa. Furthermore, its stalks can be used to provide fodder for livestock in rural areas where farmers have difficulties to reach compound feed.

Figure 18 Wheat Yield in the OIC and the World

Source: Annex 29

Figure 19 shows the maize yields in the OIC and the World. In 2020, average maize yield of OIC member countries reached 4.45 tons/hectare, from 2.9 tons/hectare in 1995. The increase in maize yield in the OIC member countries between 1995 and 2020 was parallel with the increase in the World; i.e., 66 percent for the OIC and almost 55 percent for the World. Nonetheless, the maize yield in the OIC has been considerably lower than the World average overtime, and it is still behind the world's level in 1990s. As of 2020, world average wheat yield was 29 percent higher than that of OIC member countries.

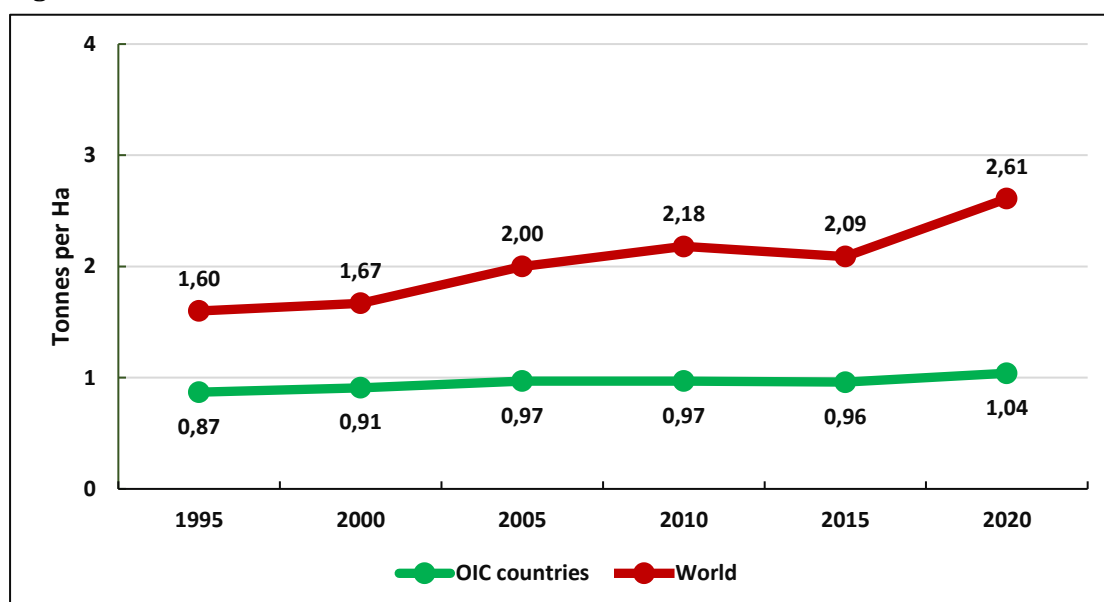
Figure 19 Maize Yield in the OIC and the World

Source: Annex 30

Lastly, one of the widely produced agricultural products in the OIC member countries is cotton, which provides main sources of raw materials to textile industry. Furthermore, it is an important cash crop for millions of farmers, which generates income to rural household. Therefore, it enhances the food security of farmers with respect to accessibility of food, especially in poor regions.

Cotton yield in the OIC and world is illustrated in Figure 20 during the period 1995-2020. As seen in the figure, the yield of cotton in the OIC member countries shows a poor performance over the last two decades. While it is noted 0.87 tons/hectare in 1995, it slightly increased to 1,004 tons/hectare in 2020. Over the period of 1995-2020, the world average cotton yield was always higher than the OIC figures. As of 2020, world average cotton yield was 160 percent higher than OIC's.

Figure 20 Cotton Seed Yield in the OIC and the World



Source: Annex 31

2.4 Water

Water is the most crucial input for agricultural production. One of the remarkable characteristics of water is that in addition being an indispensable input itself, it works as an augmenting input in agriculture when combined with other inputs of production such as improved seeds and fertilizer.⁶ It is estimated that growing fertilizer application and more water usage by irrigation have been responsible for over 70 percent of the crop yield increase throughout the world.⁷ The total volume of water on earth is about 1.4 billion km³ of which only 2.5 percent, or about 35 million km³, is freshwater.

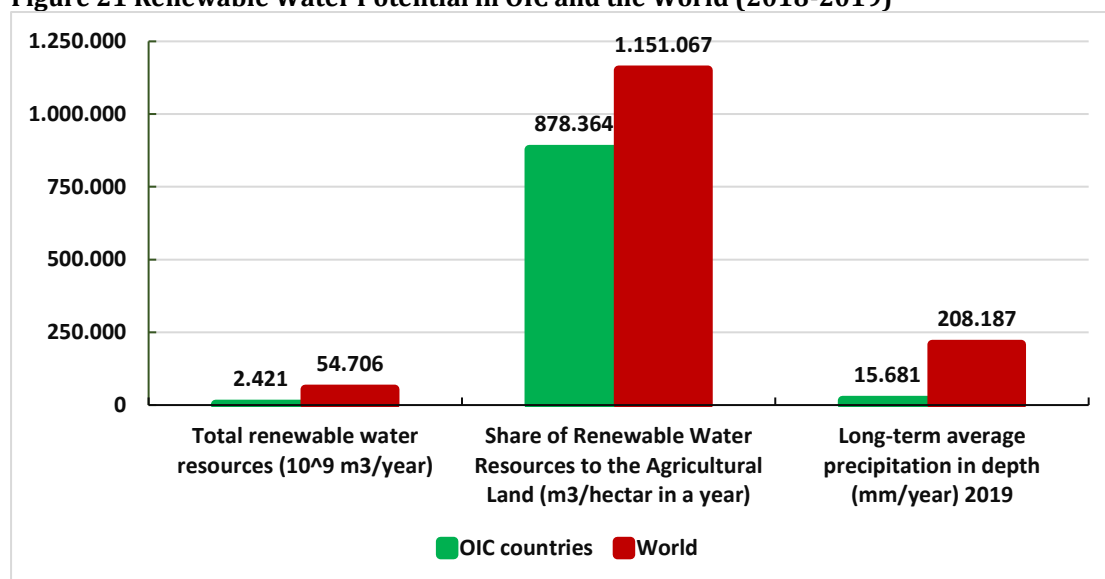
Freshwater is a highly valuable resource as there are large number of competing demands,

⁶ Nayak and Bhattacharjee, 2005.

⁷ Nellemann et. al, 2009.

including drinking water, irrigation, hydroelectricity, waste disposal, industrial processes, transport and recreation, as well as ecosystem functions and services. As mentioned above, agricultural sector is the most important user (with 70 percent) of all freshwater used by humans among the competing sectors at the global level.⁸ In the OIC, agriculture sector consumes 86 percent of the total fresh water which is higher than the world average.⁹ In developing regions like Africa and Asia, agriculture uses more fresh water. On the other hand, the share of agriculture in water consumption is lower in continents having high level of precipitation than arid and semi-arid ones.

Figure 21 Renewable Water Potential in OIC and the World (2018-2019)

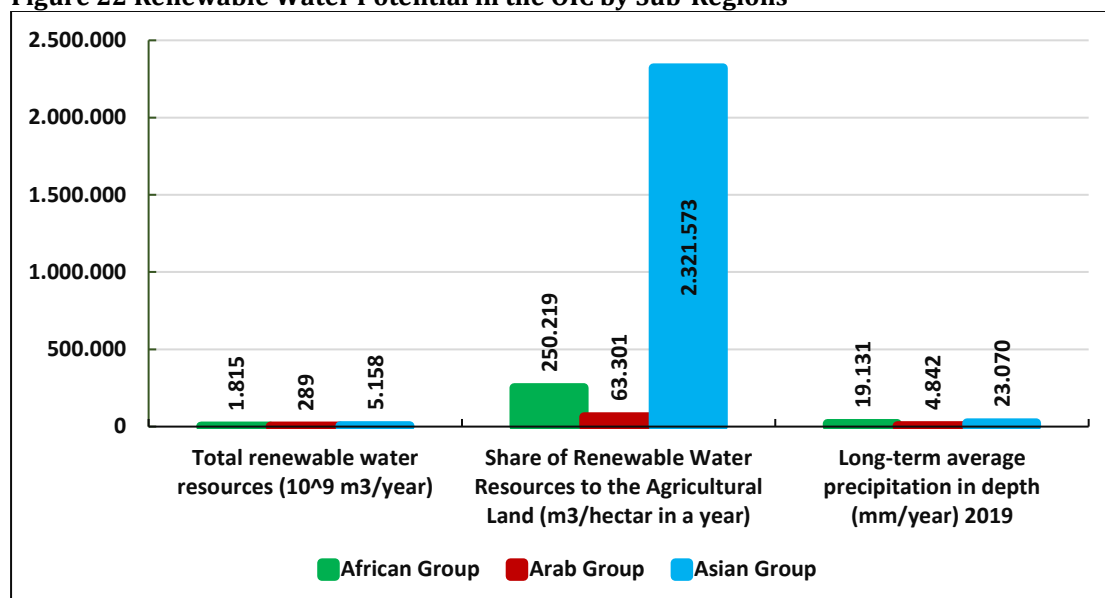


Source: Annex 32

According to FAO data, total renewable water resources in the world have been declining, and it is calculated as 54,705 km³/year for the period 2018-2019. The continental distribution of total renewable water resources can be seen in Figure 21. America has 25,203 km³/year total renewable water resources constituting 46.1 percent of the world. Following to America, Asia and Europe comprise 15,242 km³/year and 7,736 km³/year total renewable water resources, respectively. Figure 21 also shows another meaningful indicator which is called renewable water resources per hectare of agricultural land. It provides adequacy rate of total renewable water resources with respect to agricultural land of a region. With respect to this indicator, America, which possesses one fourth of the world's total agricultural area, has still the most renewable water resources per hectare of agricultural land with 20,580 m³/ha. It can be explained by its rich water potential. Following to America, Europe, having 9.5 percent of the world's total agricultural area, has 16,531 m³/ha renewable water for per hectare agricultural land. Lastly, Africa and Asia, covering most of the OIC member countries, have very low level renewable fresh water for per hectares compared to America, Europe and the average of the world.

⁸ UNEP, 2002.

⁹ SESRIC, 2014.

Figure 22 Renewable Water Potential in the OIC by Sub-Regions


Source: Annex 32

OIC member countries have 2,421 km³/year of renewable water resources for the period 2018-2019 that accounts for 4.42 percent of the world's total. Taking into account the fact that OIC member countries have 28 percent of world's total agricultural area, we can say that, the majority of the Member Countries face water scarcity. This observation can be clearly seen from Figure 21. Average renewable water resources per hectare of agricultural land in the OIC is 5,199 m³/ha, which is lower than half of the World's average.

At the sub-regional level, renewable water resources disperse unequally in the OIC. Moreover, the share of renewable water resources to the agricultural land varies considerably among its sub-regions. While Asian Group has 71 percent of the renewable water resources in the OIC, it possesses 5,158 m³/ha renewable water per hectare of agricultural land, Arab Group owns 4 percent of renewable water resources with 289 m³/ha renewable water per hectare of agricultural land. Among the Asian countries, Suriname is a very small country, but it has raised the average for this region considerably due to excessive rainfall.

Since OIC member countries are dispersed over a large geographical region, on four continents and have wide range of climate conditions, big differences are seen at the country level regarding amount of renewable water resources. In terms of their renewable water resources per hectare of agricultural land, some OIC member countries are very rich while most of them are face water-scarcity.

Table 7 and Table 8 indicate renewable water-rich OIC member countries and renewable water-poor OIC member countries, respectively. Analyzing Table 7, it is seen that Suriname, Brunei Darussalam has relatively high levels of water resources per hectare of agricultural land. They are followed by Guyana, Bangladesh, Malaysia, Sierra Leone, Indonesia, Gabon, Cameroon, and Albania.

Table 7 Renewable Water-Rich OIC Member Countries (2013-2017)

Top Ten Renewable Water-Rich Country		Renewable Water Resources Per Hectare (m ³ /ha)
1	Suriname	1,192,771.1
2	Brunei Darussalam	634,328.4
3	Guyana	161,501.8
4	Bangladesh	134,465.8
5	Malaysia	74,843.5
6	Sierra Leone	39,052.6
7	Indonesia	35,734.5
8	Gabon	32,170.5
9	Cameroon	29,035.9
10	Albania	25,139.4

Source: FAOSTAT

On the other hand, 19 countries have less than 1,000 m³/ha renewable water per hectare of agricultural land. Table 8 shows that Saudi Arabia, Libya, Yemen, Kuwait, Djibouti, Algeria, Mauritania, Somalia, Sudan and United Arab Emirates are the top ten Renewable Water-Poor Countries.

Table 8 Renewable Water-Poor OIC Member Countries (2013-2017)

Top Ten Renewable Water-Poor Country		Renewable Water Resources Per Hectare (m ³ /ha)
1	Saudi Arabia	13.8
2	Libya	45.6
3	Yemen	89.2
4	Kuwait	131.6
5	Djibouti	176.3
6	Algeria	281.7
7	Mauritania	287.4
8	Somalia	333.1
9	Sudan (former)	335.4
10	United Arab Emirates	377.8

Source: FAOSTAT

In addition to current water potential, the other important water resource is precipitation. Precipitation provides soil with moisture that is a crucial factor for productivity in agriculture. Looking at precipitation in OIC member countries, it is understood that most of them have average precipitation less than 500 mm per year implying high prevalence of aridity. Especially, most of the 20 countries in the Arab Group have less than 500 mm precipitation level except for Comoros and Lebanon. On the other hand, 19 countries possess more than 1,000 mm average long-term precipitation annually. Of these countries, Malaysia, Brunei, Indonesia, Bangladesh, Sierra Leone, Guyana and Suriname receive over 2,000 mm.

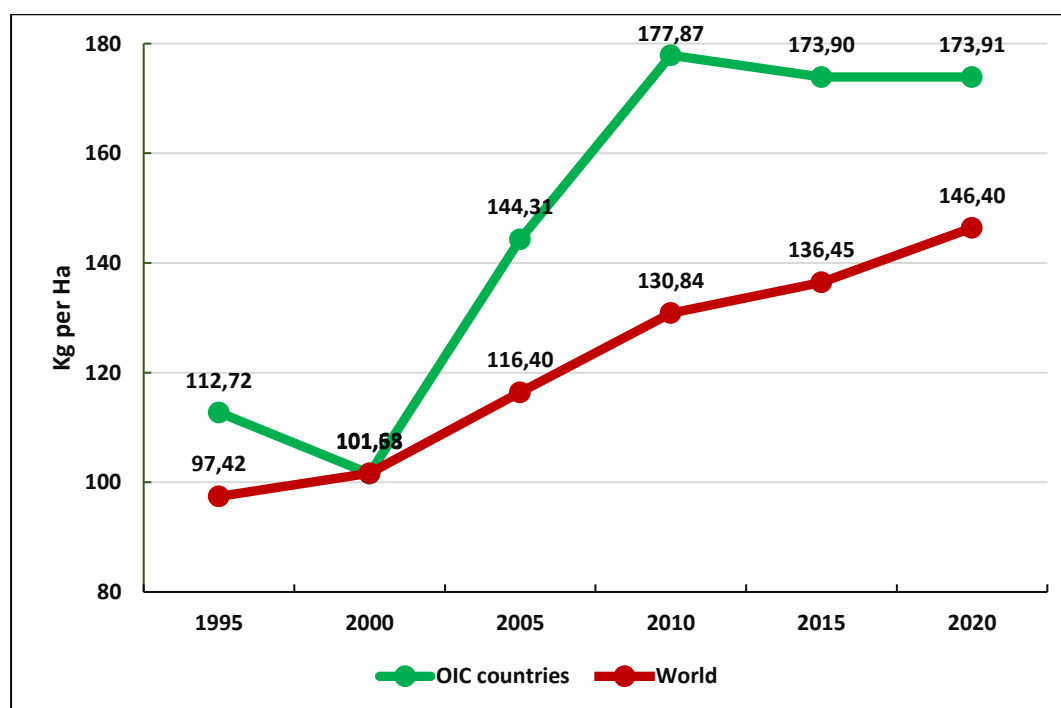
When discussing irrigation, it is not sufficient to know only the water potential. Additionally, we need to look at the utilization of this potential in agriculture. Large part of the OIC member countries are located in arid and semi-arid regions geographically. Hence, widespread and modern irrigation systems, including water storage facilities are required.

In the OIC member countries as a whole traditional way of irrigation are widely used. Therefore, the efficient use of water in agriculture is not adequately addressed by most of the countries of the region where sustainability of the existing irrigation systems is at stake. While surface irrigation is by far the most widely used system in irrigation (practiced on 82.1 percent of the total full and partial controlled irrigation area), the most water-saving system through micro-irrigation techniques is only practiced on a mere 1.7 percent of the total irrigation area.¹⁰

2.5 Fertilizer

It stayed at almost the same level and reached to 173,91 kilograms from 173,90 kilograms in 2015-2020. The world average fertilizer use also stayed at almost the same level and reached to 146,40 kilograms from 136,45 kilograms in 2015-2020. As of 2020, average fertilizer use in the OIC member countries was 63 percent below the World average level (Figure 23).

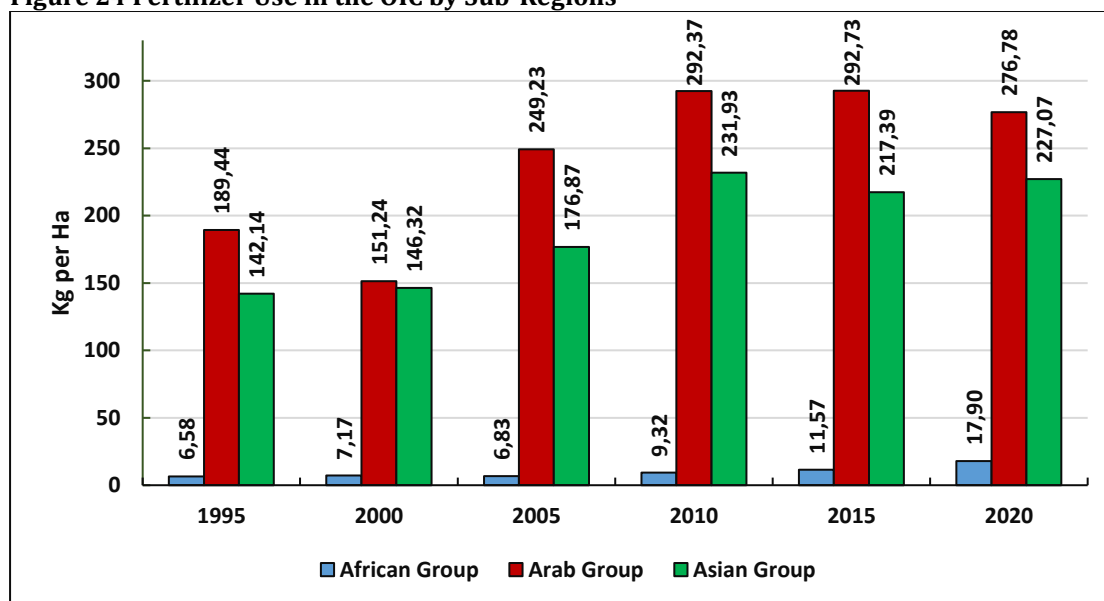
Figure 23 Fertilizer Use in the OIC and World



Source: Annex 33

At the sub-regional level, the use of fertilizers in the African Group Countries was very low with 17.9 kg/hectare in 2020. On the other hand, the use of fertilizer in Arab Group Countries and Asian Group Countries are 276,78 kg/hectare and 227,07 kg/hectare, respectively (Figure 24).

¹⁰ SESRIC, 2014

Figure 24 Fertilizer Use in the OIC by Sub-Regions

Source: Annex 33

2.6 Mechanization

In general, the ratio of the number of tractors used to arable land is decreasing in OIC. In OIC member countries, the number of tractors actually used has increased, but this is due to a higher increase in arable land area. In developed countries and other developing countries, the ratio is on a similar downward trend.

Developed countries and other developing countries also experienced a similar reduction in this ratio. The world average was 4.8 and the average of other developing countries was 1.72. In other words, compared with other developing countries and the world average, the OIC member countries are in a better position collectively in terms of tractor use. Nevertheless, the OIC member countries still have insufficient agricultural mechanization relative to developed countries group in which the ratio is calculated as 10. Therefore, considering that the same area of arable land is harvested by 6.9 tractors in the OIC member countries compared to 10 tractors in developed countries, the use of agricultural machinery in the OIC member countries needs to be improved.¹¹

¹¹ SESRIC, 2014

3. The State of Food Insecurity

Income level and distribution is the most important factor in ensuring food security in the world, and low per capita income negatively affects access to food¹². According to the FAO, food security exists when all people, at all times, have physical, social and economic access to sufficient, safe and nutritious food which meets their dietary needs and food preferences for an active and healthy life. Household food security is the application of this concept to the family level, with individuals within households as the focus of concern.

Even though the definition of food security can be easily understood, the measurement of food security requires much more effort. In order to tackle this issue, many experts and international organizations have studied the concept with the aim of building a wide food security information system. Hence, a set of indicators which aims to capture various aspects of food insecurity was defined in 2011 by the Committee on World Food Security hosted at FAO headquarters. In the selection process of food security indicators, the availability of data with sufficient coverage was taken into consideration in order to enable comparisons across regions and over time. Therefore, several indicators which are produced and published by different international organization are used to reveal the state of food insecurity in the world. These indicators are progressively revised and regarding this section, the latest set of indicators and their data retrieved through “Suite of Food Security Indicators” were used as released by FAO on May 2, 2018. In this study, indicators are classified along the four dimensions of food security, namely availability, access, utilization and stability.

3.1 Availability

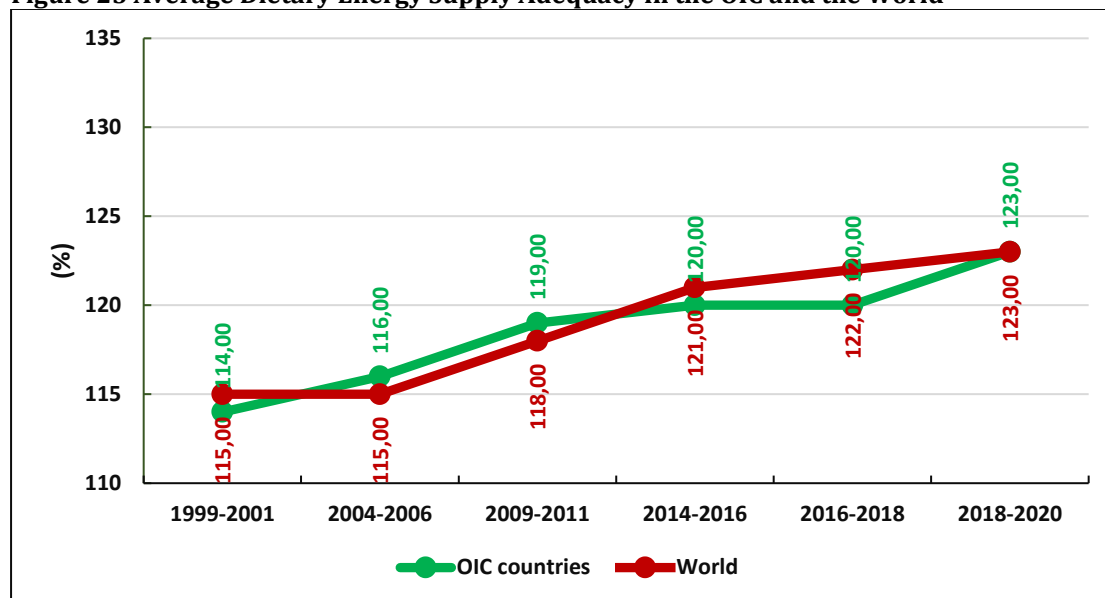
According to FAO definition, availability refers to physical availability of food. It addresses the supply side of food security and is determined by the level of food production, stock levels and net trade.¹³ Therefore, the availability aspect of food security deals with whether there is sufficient quantity of food available on a consistent basis at the household, community, country or international level to provide food for everyone.

The availability dimension of food security can be measured by various indicators such as average dietary energy supply adequacy, average value of food production, share of dietary energy supply derived from cereals, roots and tubers, average protein supply, average supply of protein of animal origin. For this study, average dietary energy supply adequacy, average value of food production and average protein supply are taken into consideration.

Dietary Energy Supply Adequacy: It illustrates the developments in average dietary energy supply adequacy in the OIC member countries and the world. It is calculated as three-year averages from 1999-2001 to 2018-2020 to provide an index of adequacy of the food supply in terms of calories (Figure 25). As it is seen in the figure, there is not a serious problem neither in the OIC nor in the world in terms of average dietary energy supply adequacy. Average dietary energy supply adequacy in the OIC has become slightly lower compared to the world recently.

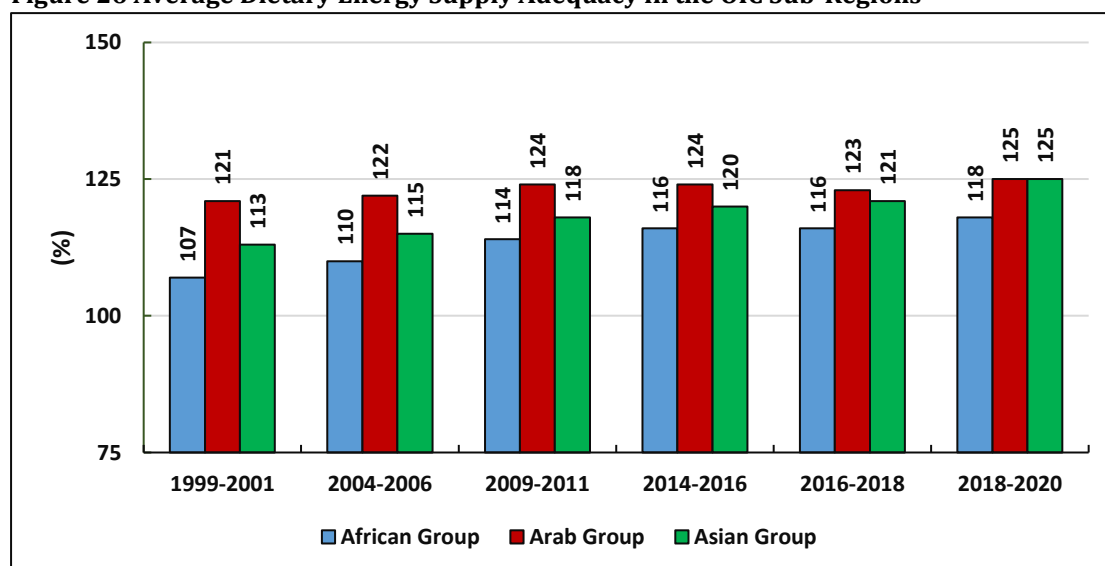
¹² Güneş and Turmuş, 2020. Evaluation of grain sector in terms of food security in Turkey and the World, Turkish Journal of Bioethics, Vol:7, No:3,124-143.

¹³ FAO, 2008

Figure 25 Average Dietary Energy Supply Adequacy in the OIC and the World

Source: Annex 34

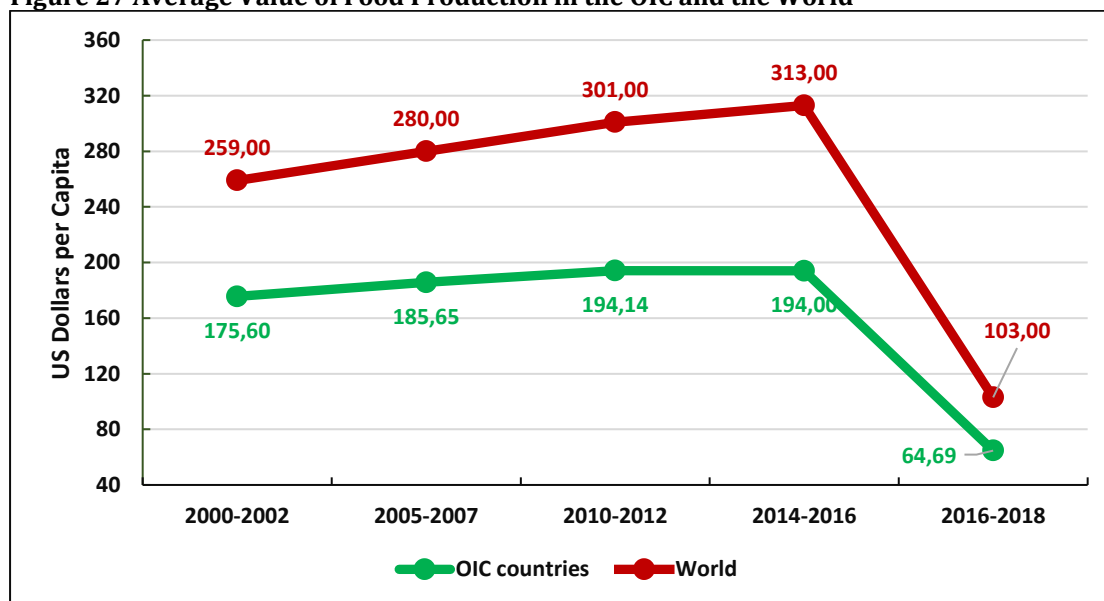
At the sub-regional level, average dietary energy supply adequacy is the highest both in the Arab Group and Asian Group with 121-113 percent in 1999-2001. Considering the adequacy rate of developed countries which is 123 percent, Arab Group and Asian Group has moderately same level dietary energy supply adequacy than developed countries as 125 during 2018-2020 years. On the other hand, even though the rate of growth in average dietary energy supply adequacy is higher in the African Group, it is still below the OIC average (Figure 26).

Figure 26 Average Dietary Energy Supply Adequacy in the OIC Sub-Regions

Source: Annex 34

Value of Food Production: Average value of food production, which provides a cross country comparison of the relative economic size of the food supply in a country or region, is another indicator to measure the availability aspects of food security. It is calculated in three-year averages, and expresses the food net production value, in constant 2014-16 international dollar terms, per caput. However, it finally entered a rapid downward trend in the 2016-2018 period.

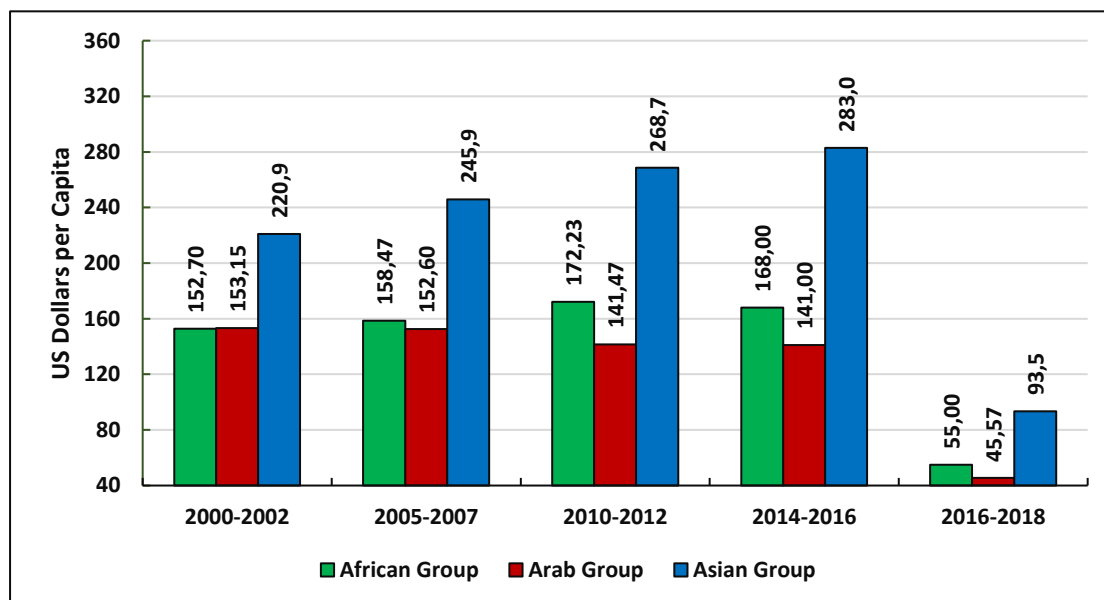
Figure 27 Average Value of Food Production in the OIC and the World



Source: Annex 35

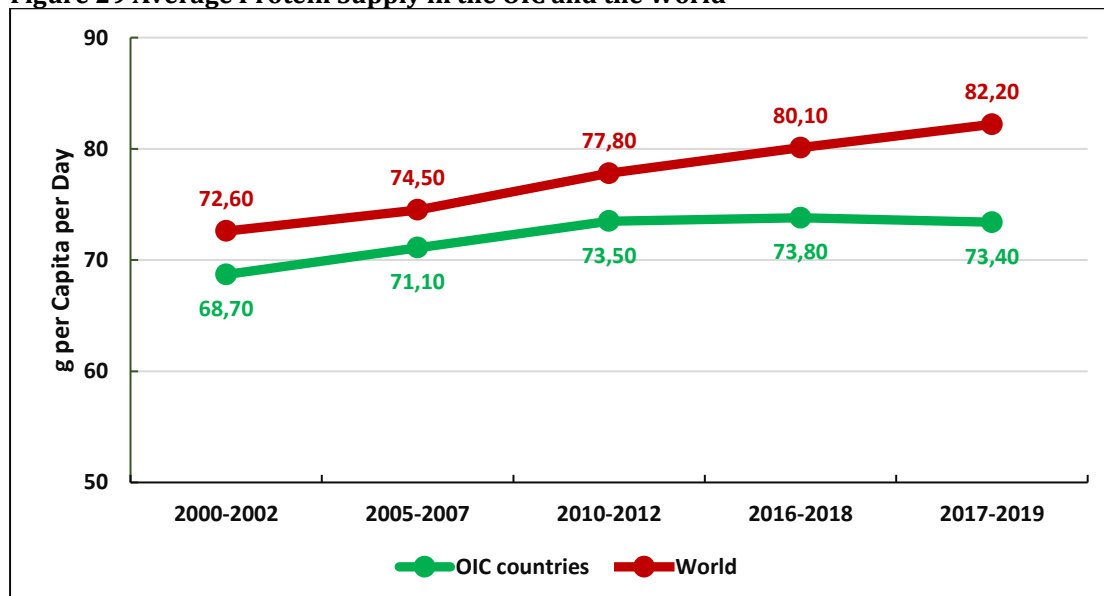
Figure 27 shows the average value of food production from 2000-2002 to 2016-2018. As of 2016-2018, average value of food production in the OIC member countries decreased to 65 dollars per capita, from 176 dollars in 2000-2002. Between these periods, it has decreased by 63 percent and stayed lower than the world average.

At the sub-regional level, Asian Group has the highest average value of food production per caput with 94 dollars, decreasing from 221 dollars in 2000-2002. As of 2016-2018 period, Asian Group was followed by African Group and Arab Group with 55 and 46 dollars per capita respectively (Figure 28).

Figure 28 Average Value of Food Production in the OIC Sub-Regions


Source: Annex 35

Average Protein Supply: In this study, the last indicator examined under the availability facet of food security is average protein supply. Since the importance of proteins in human diets is substantial and they are considered as the keystone of body organs, average protein intake of people closely associated with sufficient and well-balanced nutrition. Therefore, average protein supply per caput in a day is a useful indicator to measure the food security of a country or region.

Figure 29 Average Protein Supply in the OIC and the World


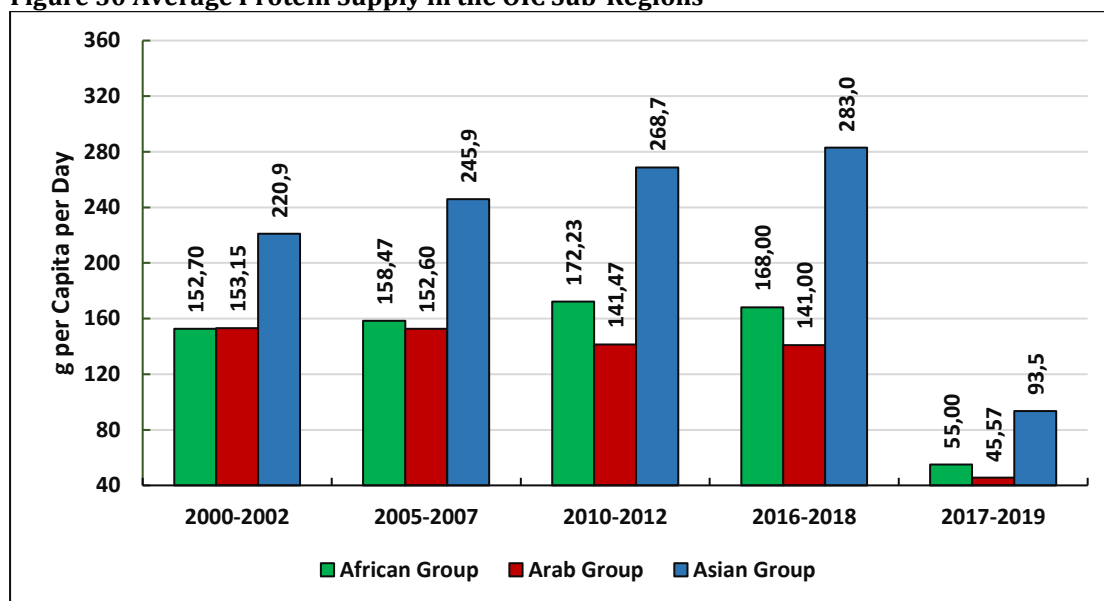
Source: Annex 36

Figure 29 illustrates that average protein supply per caput in a day in the OIC member countries reached to 73.4 gr/caput in 2017-2019; while it was around 70 gr/caput in the middle of 2000s.

Compared to the world, it was 68.7 at the beginning of the 2000s. In the last 20 years, it was always lower than the World average.

At the sub-regional level, as well as all four time periods included in this analysis, Asian Group had the highest average daily protein supply per person with 80,6 g in 2016-2018. Asian Group was followed by Arab Group and African Group with 78,4 g and 62,4 gr respectively. Protein supply is sufficient in very few countries such as Kuwait, Maldives, United Arab Emirates and Türkiye. In most of the African Group countries, only half of required amount of protein has been supplied (Figure 30).

Figure 30 Average Protein Supply in the OIC Sub-Regions

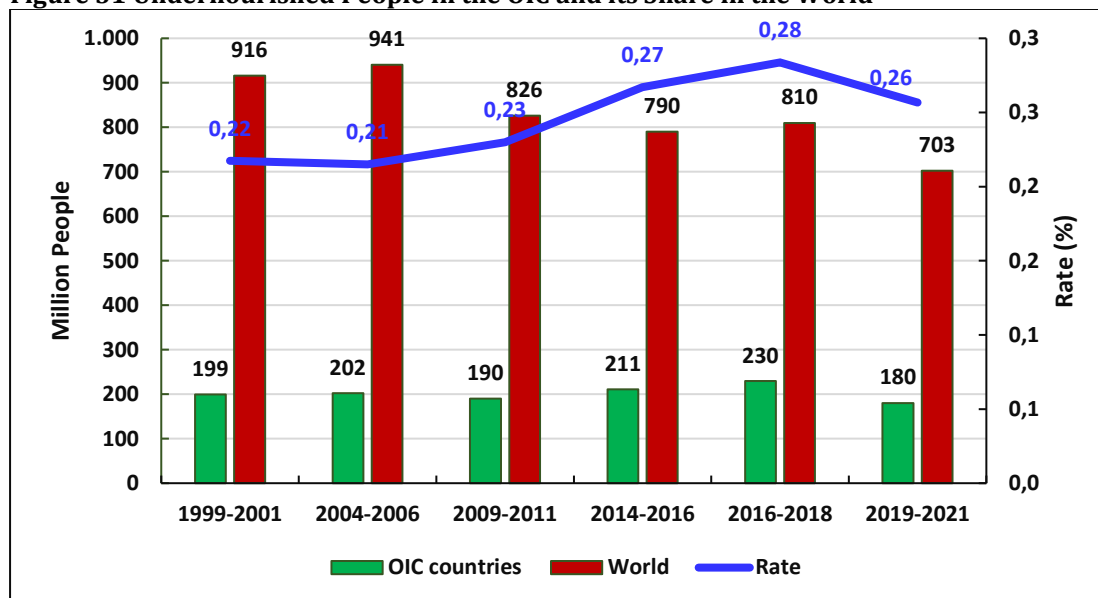


Source: Annex 36

Furthermore, number of people at risk of undernourishment is a broad indicator. According to FAO definition, undernourishment means that a person is not able to acquire enough food to meet the daily minimum dietary energy requirements, over a period of one year. The number of undernourished people in the OIC is calculated by applying the estimated prevalence of undernourishment to total population.

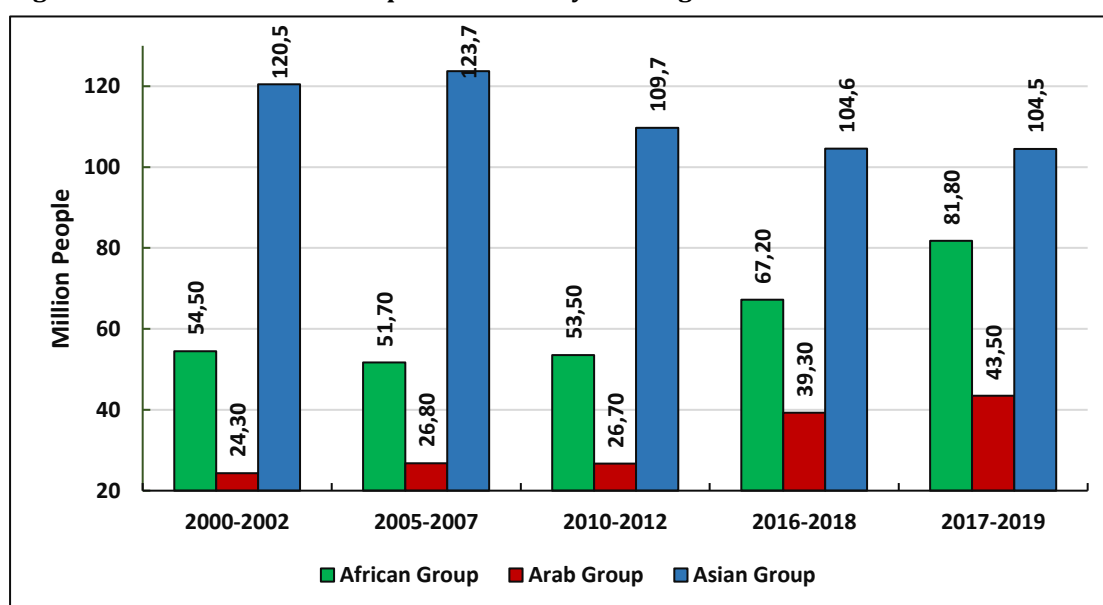
Figure 31 displays that as of 2019-2021, 180 million people are expected to be undernourished in the OIC member countries which accounts for 226 percent of undernourished people in the World. In the last 20 years, while the number of undernourished people in the World has fallen gradually, it remained almost the same in the OIC member countries. Therefore, the share of OIC in undernourished people of the World has risen from 21.75 percent in 1999-2001 to 26 percent 2019-2021. This can be explained by the impact of the surge in food insecurity, particularly after the food crisis in 2006-2008 that brought forth serious socioeconomic challenges both for households and policy makers in the developing regions of Asia & Pacific, Sub-Saharan Africa and Latin America and Caribbean where the majority of the OIC member countries are located.¹⁴

¹⁴ SESRIC, 2015

Figure 31 Undernourished People in the OIC and its Share in the World

Source: Annex 37

At the sub- regional level, despite of the higher proportion of undernourishment in the African Group, Asian Group has almost half of the total undernourished people in the OIC member countries due to its high population. Figure 32 shows that 104.5 million undernourished people are expected to live in the Asian Group, which accounts for nearly 45 percent of undernourished population in the OIC as of 2017-2019

Figure 32 Undernourished People in the OIC by Sub-Regions

Source: Annex 37

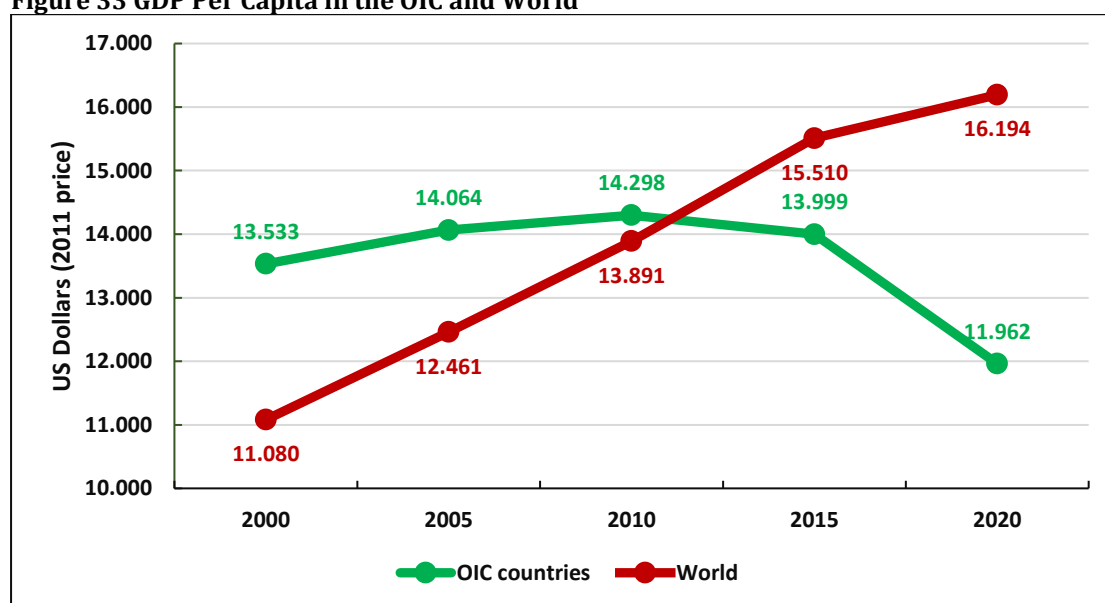
3.2 Access

World Health Organization defines the food access as having sufficient resources to obtain appropriate foods for a nutritious diet.¹⁵ Access dimension of food security is fully met when all people in a country have all adequate resources needed to acquire sufficient nutritious and safe food. Therefore, the concept of food accessibility encompasses several issues such as affordability of individuals to purchase foods, distribution of income and consumption, existence of nutritious goods in nearby grocery stores, sufficient and convenient transportation nets to reach local food retailers.

In the FAO study of food security indicators, the access dimension of food security is measured by various indicators such as percent of paved roads over total roads, road density, rail lines density, gross domestic product per capita, domestic food price index, prevalence of undernourishment, share of food expenditure of the poor, depth of the food deficit, distribution of consumption and prevalence of food inadequacy.¹⁶

Two of the most important indicators of access are the average level of income and the distribution of the income in a country. In this section we present two such indicators, namely GDP Per Capita, Food Prices, and Calorie Consumption Distribution.

Figure 33 GDP Per Capita in the OIC and World



Source: Annex 38

GDP Per Capita: Figure 33 demonstrates the developments in GDP per capita valued at constant 2010 International Dollars using purchasing power parity rates in the OIC and World and by using a weighted population average. Therefore, this indicator provides information on the possibility of economical access to markets taking into account the purchasing power of regions. As it is seen in the figure, average GDP per capita of the OIC member countries reached 16,194 Int. Dollars, while it was 13,533 Int. Dollars in 2000s. Compared to the world, average GDP per

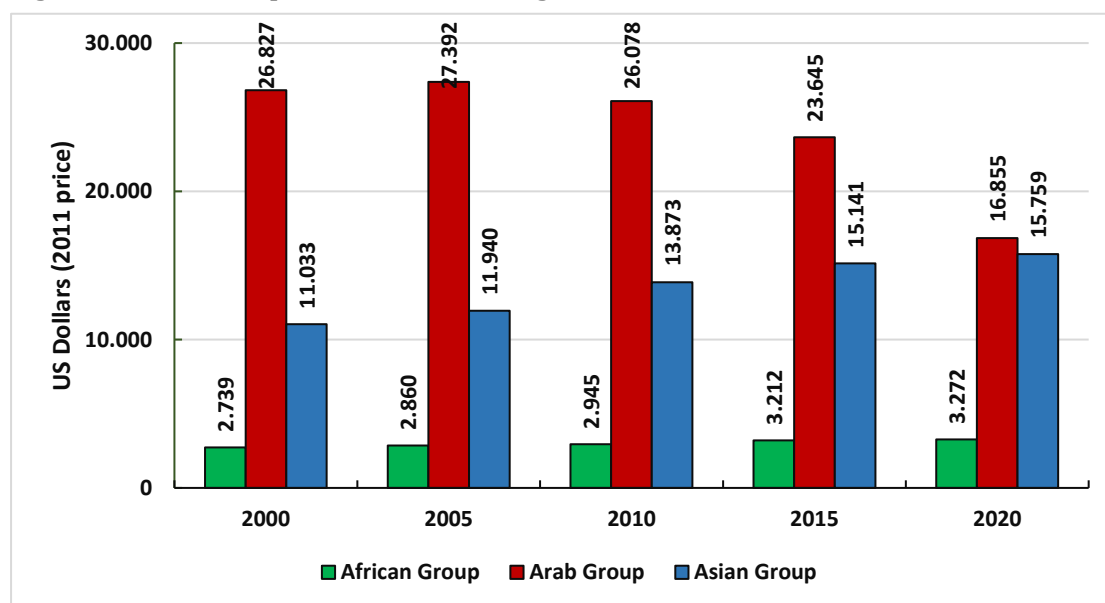
¹⁵ WHO, 2015.

¹⁶ FAO, 2015b.

capita was almost the same in 2010, however, it has continued to decrease until now. Nonetheless, 11.6 percent decrease in the GDP per capita of the OIC member countries in the period 2000-2020 while the world average has increased 46% in the same time period.

At the sub-regional level, average GDP per capita of Arab Group was the highest with 16,855 Int. Dollars in 2020. It was followed by Asian Group and African Group with 15,759 and 3,272 Int. Dollars, respectively. Figure 34 shows that the decline in GDP is driven by the Arab group. The main reason for this decline in 2016-2020 is the decline in oil revenues of Arab countries.

Figure 34 GDP Per Capita in the OIC Sub-Regions



Source: Annex 38

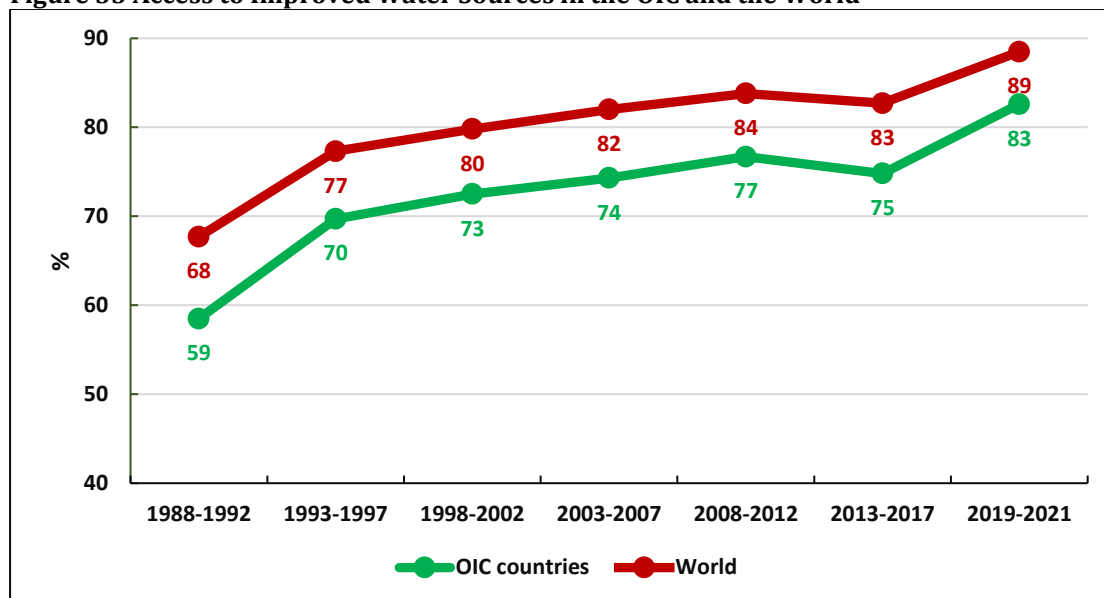
3.3 Utilization

According to FAO definition, utilization refers to the act of food usage and consumption through adequate diet, clean water, sanitation and health care to reach a state of nutritional well-being where all physiological needs of individuals are met.¹⁷ Therefore, the significance of non-food inputs is mainly emphasized with respect to utilization aspects of food security. Hence, general hygiene and sanitation, water quality, health care practices and food safety and quality are considered as fundamental determinants of food utilization.

In the FAO study of food security indicators, the utilization dimension of food security is measured by various indicators such as access to improved water sources, access to improved sanitation facilities, percentage of children under 5 years of age who are stunted, percentage of children under 5 years of age who are underweight, percentage of adults who are underweight, prevalence of anemia among pregnant women, prevalence of anemia among children under 5 years of age, prevalence of vitamin A deficiency in the population, prevalence of iodine deficiency. For the scope of this study, access to improved water sources is chosen to represent utilization aspects of food security in the OIC member countries.

¹⁷ FAO, 2006.

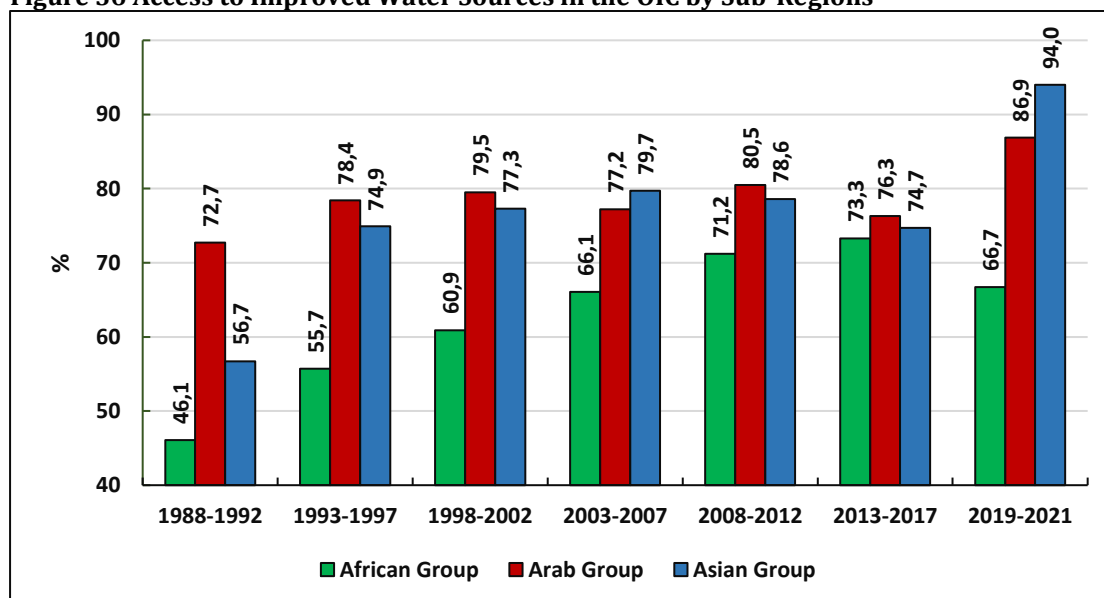
Figure 35 Access to Improved Water Sources in the OIC and the World



Source: Annex 39

Figure 35 illustrates the percentage of population having access to improved drinking water sources in the OIC and the World. As of 2019-2021, 83 percent of OIC population has access to improved drinking water sources compared to 59 percent in 1988-92. Access to improved water sources in the OIC has been lower than the world average over the years

Figure 36 Access to Improved Water Sources in the OIC by Sub-Regions



Source: Annex 39

At the sub-regional level, there does not appear to be a serious problem in Asian and Arab Groups with respect to access to improved water sources since the values in these groups have been in line with the World average over the period of 1990-2021 (Figure 36). In the period of 1990-2000, African Group countries were quite below the World average. In 2020, the percentage of population having access to improved drinking water sources has reached 87 percent in the Arab Group 94 percent in the Asian Group, and 67 percent in the African Group, all of which were slightly lower than the World average. Even though great extent of progress has been achieved from the 1990s to the present in terms of population having access to improve drinking water sources, it is still a concern in the OIC Member Countries.

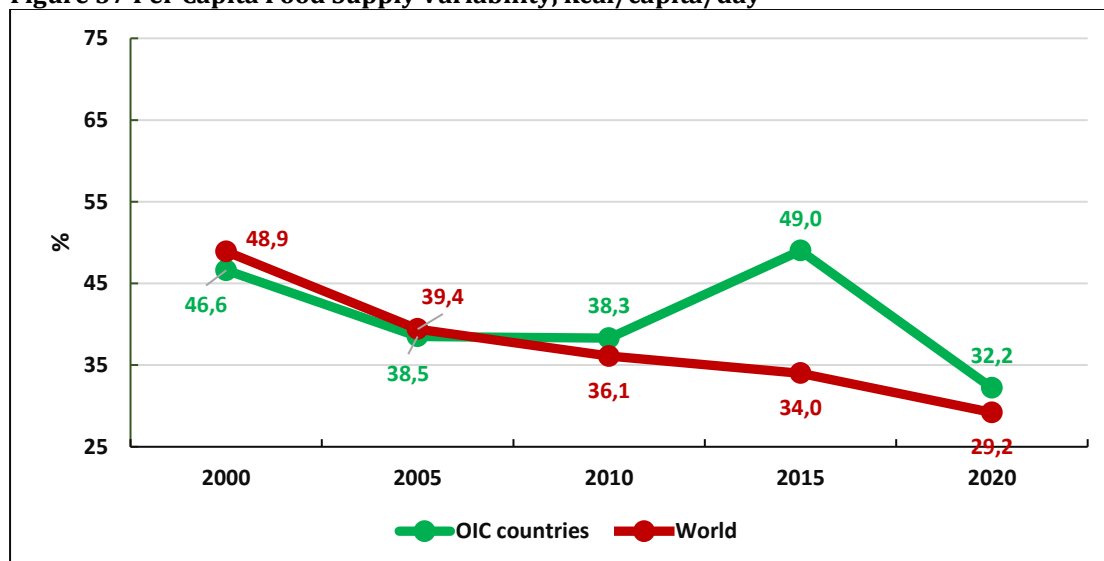
3.4 Stability

The definition of food security stresses the time spatial extent of food security by stating “when all people, **at all times**, have physical, social and economic access to safe and nutritious food for an active and healthy life”. In this definition, **at all times** refer to the stability aspect by covering the availability, access and utilization dimension of food security on a periodic basis. Furthermore, it emphasizes the importance of having to reduce the risk of adverse effects on the other three dimensions, namely availability, access and utilization. Therefore, these three dimensions should be stable over time and not be affected negatively by natural (drought, floods), social (unemployment), economic, (rising food prices) or political factors (social unrest).

Accordingly, FAO describes the stability dimension of food security such that a population, household or individual must have acquire to adequate food **at all times** without any risk losing access to food as a consequence of sudden shocks (e.g., an economic or climatic crisis) or cyclical events (e.g. seasonal food insecurity).¹⁶

In the FAO study of food security indicators, the access dimension of food security is measured by various indicators such as cereal import dependency ratio, percent of arable land equipped for irrigation, value of food imports over total merchandise exports, political stability and absence of violence/terrorism, domestic food price volatility, per capita food production variability, per capita food supply variability. In this study, among these indicators, per capita food supply variability which compares the variations of per capita food supply across countries and time is seen as the most useful indicator to assess the stability dimension of food security in the OIC member countries.

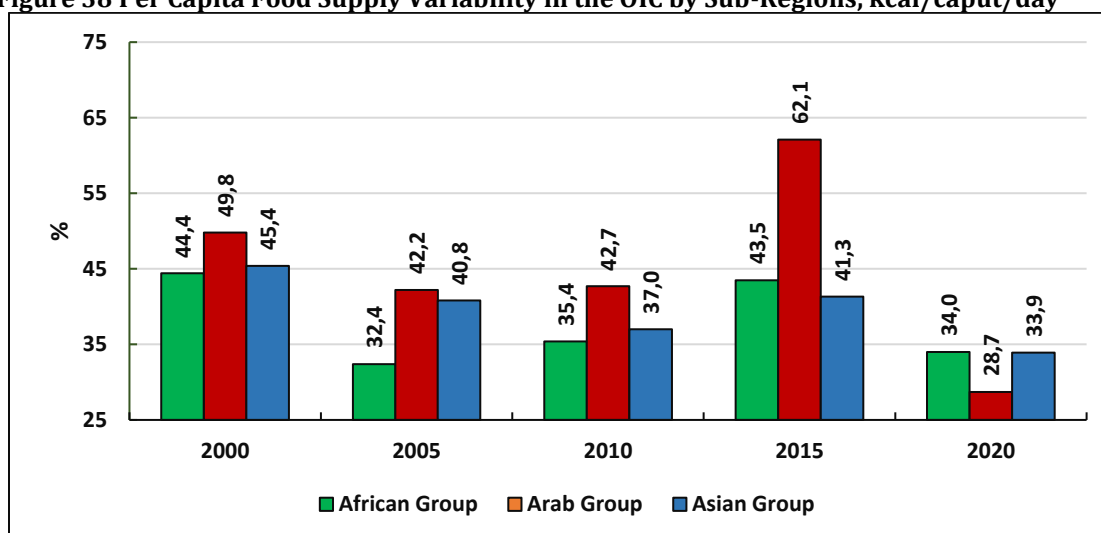
Figure 37 Per Capita Food Supply Variability, kcal/capita/day



Source: Annex 40

Figure 37 and 38 illustrates the domestic food price volatility index that corresponds to the variability of the "food supply in kcal/caput/day" in the world and OIC member countries, respectively. The variability index series is calculated by fitting a cubic spline trend by ordinary least squares to the series. The difference between the cubic fit and the actual values are then computed and then the index for a specific year is defined as the standard deviation of these differences over the previous five years. In fact, it does not seem possible to talk about an upward trend for OIC countries after 2010. Clearly, the process needs to be explained by a graph with ups and downs.

Figure 38 Per Capita Food Supply Variability in the OIC by Sub-Regions, kcal/caput/day



Source: Annex 40

At the sub-regional level, there appears to be a serious problem for each Group but it is most acute for Asian and African Group. In 2020, the food supply variability has decreased 28,7 in the Arab Group and it is followed by 33,9 and 34 percent values for Asian and African Groups, respectively. The deviation for 2020 was quite high for the Arab Group. This can be attributed to the impact of the food crisis in Lebanon, Somali and Sudan during this period.

4. Transformation of Food Systems and global changes after COVID-19: Impact on Agriculture development in OIC

The effects of COVID-19 were strongly felt in 2021, but its effects are diminishing despite the growth of its different types. Many poor and vulnerable people have faced serious threats to their immediate food security, health, and nutrition of which some OIC member states were harshly hit. Various vaccines were approved by international health authorities however, for those countries that cannot access to vaccines quickly, the pandemic prolonged, with consequences for people's long-term prospects as a result of lost livelihoods, malnutrition, missed education, and depleted assets. The crisis has also highlighted the weaknesses and deficiencies already present in our food, health and economic systems that leave the poor and vulnerable at more risk. Two years into the pandemic, loss of incomes, increased food insecurity, and reduced access to healthy diets make it clear that sustainable food systems must play a central role during post COVID-19 era to put nations worldwide on track to achieve the Sustainable Development Goals (SDGs) by 2030. Food systems need to be immediately transformed to meet those goals, to better prepare us for the next crises, and to benefit the world's poor and vulnerable people. Success in this process depends on working together and cooperating in the global world. The sustainability of food systems (SFS) in member states will play a major role and provide a solid platform to reach this goal. Increased solidarity and the development of a culture of joint action will have a positive impact on this process.

The weaknesses and inequalities within food systems, among different world regions, rural and urban communities, rich and poor populations, and disadvantaged groups such as women where OIC countries are also among those hardly hit required solid policy responses. The bitter experience has taught the OIC communities that some food systems and sectors were more resilient than others, depending on their structure, governance, and roles of the public and private sector where 2021 offered a wide array of drastic lessons, innovations, and also opportunities that can transform our food systems not just to make them more resilient but also to make them more inclusive, efficient, sustainable, and healthy. Although income losses associated with lockdowns increased food insecurity and malnutrition and with increases in poverty; food supply systems still proved to be surprisingly resilient — albeit with large differences across food commodities and regions. Many countries among OIC rapidly introduced measures to secure the flow of food products, and governments expanded social safety net programs in new ways to ensure food security. Private sector innovations introduced along food supply chains (FSC) by both large companies and small and medium enterprises (SMEs) helped to overcome constraints such as lockdowns; they also stimulated investments in technologies and partnerships to keep food supply chains moving¹⁸.

¹⁸ Swinnen j., McDermott J., and Yosef S. (2021). 'Beyond the Pandemic: Transforming Food Systems after COVID-19'. In 'Transforming Food Systems after COVID 19, IFPRI, 2021.

The post-pandemic era offered a unique opportunity to fundamentally transform food systems. In this process, increased interest in agriculture and food products and sustainable agricultural production have become a priority. The fate of billions of people, many of whom have been pushed back into poverty, food insecurity, and malnutrition especially in OIC member states, depends on quick and bold action. At the national level, where 47.9% of the total population in OIC countries already suffer from food insecurity problems, quite higher than the world average of 25.4%; OIC Member States have deployed tremendous efforts to intensify joint Islamic action and solidarity in confronting the pandemic. Increasing opportunities for cooperation based on traditional values and shared culture has contributed positively to this process.

4.1. Losing the Track: The World and OIC

Our food systems already faced serious challenges in achieving equitable access to healthy, nutritious food for all (disrupting food security), environmental sustainability, and resilience to shocks even before the pandemic. The number of hungry people in the world had been rising again for several years, largely as a result of economic slowdowns, conflicts, and extreme weather events that contributed to food crises in many low- and lower-middle-income countries (LMICs)¹⁹. Increasing climatic change has increased the problem of food security. In this process, strategies to meet demand and supply have been important.

COVID19 has decreased both demand- almost 70% of the OIC countries have intermediate-high to high levels of risks in terms of demand-side transmissions - and supply of food- OIC members majorly rely on food imports and fiscally exports of raw commodities (e.g., oil) of which the prices have collapsed during the pandemic- and agriculture products owing to shocks on logistics and trade. Additionally, many OIC countries were already off track for SDG 2: Zero Hunger by 2030 before the pandemic worsened the situation. Our food systems have also failed to make sufficient progress against malnutrition. Many poor countries now face the coexistence of undernutrition, micronutrient deficiencies, and overweight and obesity, and more than 3 billion people worldwide cannot afford a healthy diet. In addition, agricultural production and other activities along the food value chain are stressing the finite natural resources, biodiversity, and the environment. Globally, agri-food systems consume more than 30 percent of energy and produce more than 20 percent of greenhouse gases (GhGs)²⁰. Climate change constitutes one of the greatest threats to our and future generations.

In order to overcome these massive challenges, food system transformation is the direct and clearest path. In this respect; ideal food systems have five critical attributes²¹ (Figure 39).

They are efficient, providing incentives and removing hurdles for the private sector — from large businesses to smallholder farmers — to deliver efficiencies all along the food supply chain, including in crop production, infrastructure, food storage and transportation, and food consumption.

¹⁹ FAO-SOFI, 2021.

²⁰ IPCC 2020.

²¹ Fans et al. (2021) <https://www.annualreviews.org/doi/10.1146/annurev-resource-101520-081337>.

They contribute to global health, producing affordable, nutritious foods, boosting demand for them among consumers, and guarding food safety.

They are inclusive of smallholder farmers and groups such as women, youth, the landless, refugees, and displaced people, helping them to build decent livelihoods and to benefit as consumers and participants in decision-making.

They are environmentally sustainable, using technological innovations, regulations, and local collective governance approaches to conserve and protect natural resources as well as biodiversity²².

Finally, ideal food systems are **resilient**. They must be able to bounce back quickly from more frequent health, climate, and economic shocks, and also provide poor households with stable livelihoods that protect them from these shocks.

Strengthening these five food system attributes requires an enabling environment for optimal food system policies, governance, and accountability. In this respect the main strengths of sustainability of the national FSCs in OIC Countries were identified as: 1) in-place systems, 2) institutional capacities, and 3) organizations; and the major weakness was identified as: 1) disaster management capacity and 2) information infrastructure. Additionally, halal food trade and foreign direct investment during the pandemic and agricultural labor force were defined as opportunities and extreme climatic events (droughts, floods, wildfires, hailstorms etc.) and swings in agricultural input prices were identified as major threats.

COVID-19 also has highlighted the risk of shocks to our food systems that can lead to multiple supply and demand disruptions assessing the need for a better resiliency against crises under turbulent times. Unfortunately, at the same time, ongoing climate-change-induced weather shocks continued as well as additional shocks affected OIC member states in 2021. Falling oil prices contributed to declines in incomes and food security in oil-exporting developing countries. Torrential rainfall in East Africa triggered swarms of locusts, and many countries experienced destructive flooding, typhoons, wildfires, hurricanes, and tropical storms that broke natural disaster records. With the likelihood that shocks, including pandemics and natural disasters, will only become more frequent, resilience from the farm to the global level must be a focus for food system transformation²³.

²² Dobson et al., "Ecology and Economics for Pandemic Prevention, (2020)." *Science* 369, no. 6502: 379–381.

²³ Alpas, H. (2021). <https://www.comcec.org/agriculture/presentations-of-the-17th-meeting-of-the-comcec-agriculture-working-group/>

Figure 39. Food system transformation goals



Source: <https://www.annualreviews.org/doi/10.1146/annurev-resource-101520-081337>

4.2. Impacts of post-COVID-19 on Food Systems

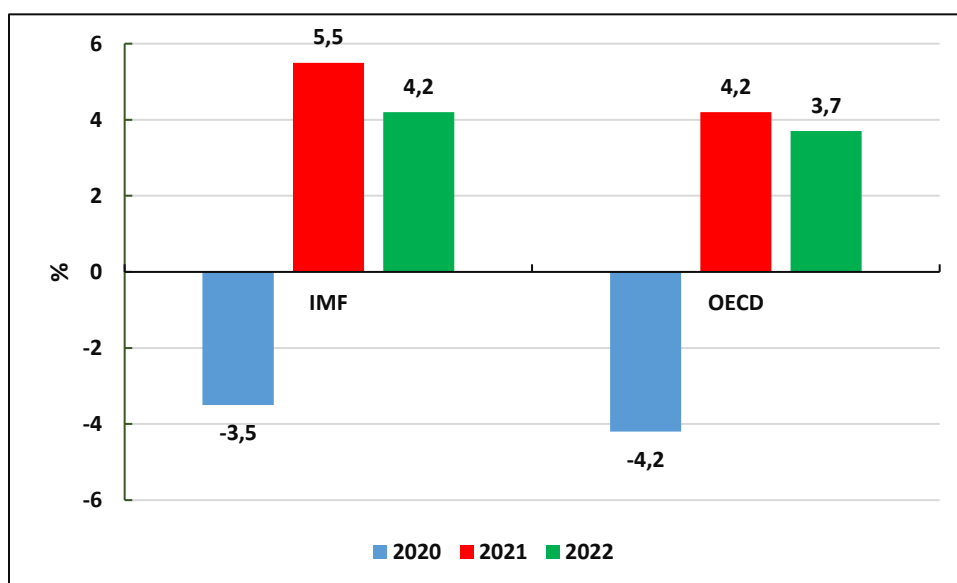
The pandemic and the policy responses adopted to address it have affected our food systems from the global to the local level, setting back already-uneven progress and exposing weaknesses and vulnerabilities. In this respect the following have been identified among many different impacts of the pandemic and post-pandemic responses on the world's food systems. These are based on what we have drastically and dramatically learned from the pandemic up to now (as of November 2021) forecasting a pathway to transform food systems for the long term in the post-COVID 19 era²⁴. It is imperative to identify the new world order and differences established after the pandemic and take precautions. This is shaped by the contribution of the public sector as well as the orientations of private sector enterprises and entrepreneurs.

4.2.1. Income Loss

The pandemic's impacts on food security have been induced primarily by falling incomes. The World Bank estimates that the global economy shrank by 5 percent in 2020, with the greatest burden borne by poor people (Figure 40)²⁵.

²⁴ HLPE 2020. <https://www.fao.org/3/ca9731en/ca9731en.pdf>

²⁵ OECD 2021. <https://www.oecd.org/economic-outlook/may-2021/>

Figure 40 Real GDP Growth Forecasts

Source: IMF, *World Economic Update*, January 2021; OECD *Economic Outlook*, Volume 2020 Issue 2

By the end of 2020, 95 million additional people -mostly in Africa south of the Sahara- were estimated to be living in extreme poverty²⁶. IFPRI research estimates that the number of poor people globally is likely to increase by about 150 million, 20 percent above the pre-pandemic poverty levels²⁷. The experiences of many countries confirm the importance of lost incomes. Food systems, which directly employ over a billion people, are about to lose more than 451 million jobs or 35% of formal employment, according to an unpublished FAO/IFPRI estimate. The jobs most at risk are in food processing, services, and distribution, disproportionately affecting female workers especially in food insecure hotspots²⁸ (Table 9).

²⁶ Wourterse F., S. Murphy, and J. Porciello, "Social Protection to Combat Hunger," *Nature Food* 1 (2020): 517–518.

²⁷ Laborde Debucquet D., W. Martin, and R. Vos, "Impacts of COVID-19 on Global Poverty, Food Security and Diets," IFPRI Discussion Paper 1993 (IFPRI, Washington, DC, 2020).

²⁸ IFPRI 2020. <https://ebrary.ifpri.org/utils/getfile/collection/p15738coll2/id/133762/filename/133971.pdf>

Table 9 Formal Jobs at Risk in Food systems

Where in value chain	Jobs (million)	Livelihoods (million)
Primary production	716,77	2,023,80
Food processing	200,73	484,54
Food services	168,97	339,44
Distribution services	96,34	241,48
Transportation services	41,61	101,05
Machinery	6,51	13,18
Inputs	4,89	11,06
R & D	0,13	0,29
Total	1,280,93	3,214,84
Total at risk due to COVID 19	451,64	1,090,89

Source: <https://ebrary.ifpri.org/utils/getfile/collection/p15738coll2/id/133762/filename/133971.pdf>

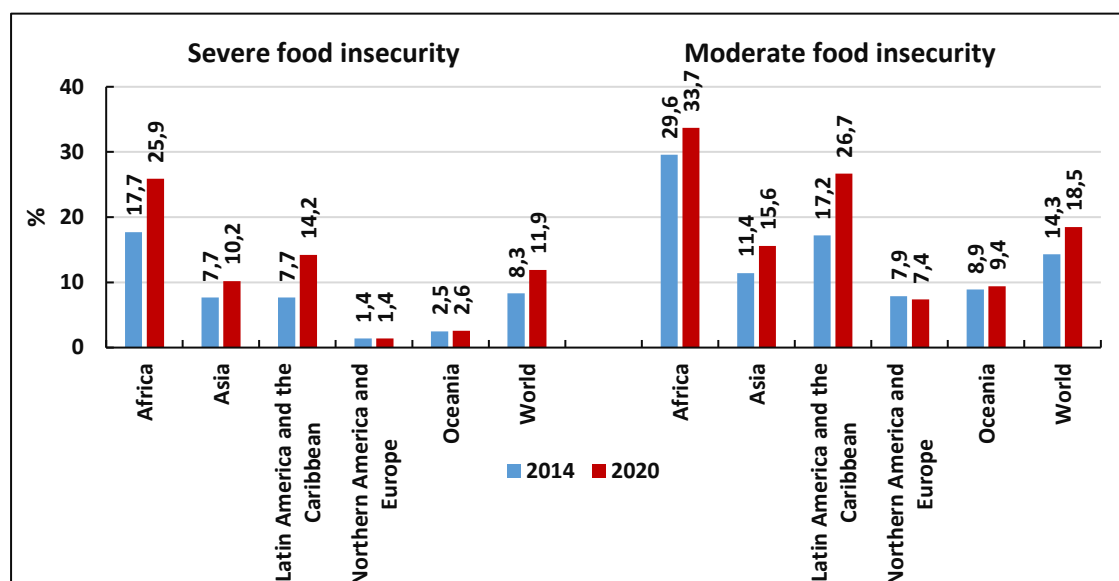
Remittance income was particularly affected because of the pandemic restrictions on travel and movement. In 2019, remittances represented more than 10 percent of gross domestic product (GDP) in seven African countries, and were also important for low-income Asian and Latin American countries²⁹.

Overall, these led to increased food insecurity in 2020 and 11.9 percent of the world population (928 million people) were exposed to severe food insecurity based on the Food Insecurity Experience Scale (FIES) (Figure 41). The levels and trends over the 2014–2020 period are broadly consistent with those of the prevalence of undernourishment (PoU), confirming that these two indicators complement each other as they both measure the extent of severe food deprivation. In 2020, it is estimated that an additional 18.5 % of the world population, or 1.4 billion people, have experienced food insecurity at moderate levels. This brings the total estimates for moderate or severe food insecurity in 2020 to 30.4 percent of the world population, or 2.4 billion people³⁰.

²⁹ Kalantaryan S. and S. McMahon. (2020) *Covid-19 and Remittances in Africa*, JRC Technical Report (Luxembourg: European Union, 2020).

³⁰ FAOSTAT (2021), <https://doi.org/10.4060/cb4477en-fig49>

Figure 41 Food Insecurity Levels Based on the Food Insecurity Experience Scale (FIES) by Region



Source: FAOSTAT (2021), <https://doi.org/10.4060/cb4477en-fig49>

4.2.2. Disruption in Food Supply Chains (FSCs)

Food supply chains were disrupted by labor restrictions and falling demand, although impacts varied along the value chains and between countries and commodities. Food services were particularly affected, and many poor people lost jobs in urban areas, especially in the agricultural production due to travel restrictions and lockdowns. Traditional food systems, with few linkages beyond the farm where some OIC members were advantageous, and modern, vertically integrated systems were relatively resilient. Food systems transitioning from traditional to modern, which are characterized by longer supply chains and still-fragmented storage, transportation, and service were more vulnerable.

Among the countries most vulnerable to food crises, the FAO identified 28 OIC countries with weak food systems. According to the FAO's classification for 2020, 28 OIC countries were among the world's 54 low-income food-deficit countries (LIFDCs). Within this frame even though OIC countries own over quarter of world's agricultural area and produce 20% of world's agricultural value-added products, they have a trade deficit in agriculture with exports meeting only two thirds of the imports. Most of the OIC states are in Sub-Saharan Africa and dry regions of West Asia and Northeastern Africa. The majority of LIFD-classified countries suffer from high undernourishment, intricate political conditions, and low incomes. These characteristics made it more difficult for actors in OIC for transitioning existing food supply chains to access markets and to procure labor and input supplies, which were affected by drops in demand and government restrictions during the pandemic³¹.

³¹ FAO Food Outlook Covid 2020, <http://www.fao.org/3/ca9509en/ca9509en.pdf>

Modern, vertically integrated supply chains, with more options in terms of suppliers and logistics as well as the ability to move many transactions online, were and will be most able to adjust to the pandemic and post-pandemic conditions; respectively.

Impacts on agricultural production and trade were also mixed. Both labor supply and perishable products were notably affected by mobility restrictions under global lockdowns. In many countries, the pandemic struck during the agricultural season, and mobility restrictions reduced the availability of labor for harvesting and other farming activities, with the most severe impacts on farms that rely heavily on hired labor. This not only affected the food production and food supply but also food loss and waste were triggered.

Some countries responded to the pandemic with trade restrictions where restrictions on exports can reduce incomes of producers, and run the risk of triggering food price spikes in importing countries. According to IFPRI's Food Trade Policy Tracker, 19 countries introduced export restrictions, with severe effects on importing countries, including some of the poorest countries in Central Asia and Africa south of the Sahara. However, many of these restrictions were removed or loosened in the second half of 2020, following strong reactions from international organizations³².

Tracing the impacts of COVID-19, a sharp decline in local food production between 2.6-7%, initial export restrictions by some countries and the logistical problems arising from the lockdown measures have disrupted access to food supplies and disturbed the continuity of the food supply chain. In this regard, measures were taken to appeal member states against food export restrictions, including financial interventions by relevant OIC funding agencies, such as Islamic Solidarity Fund (ISF), and the various subsidiaries of the Islamic Development Bank Group (IsDB) or national responses ranging from palliatives and bailout funds to the private sector to address job losses and national campaigns against food loss and waste (FLW). These and similar measures should be further expanded during the post-COVID era.

On the medium-term measures, promoting application of scientific methods towards increasing food production and nutrition security in the member states such as promoting agricultural biodiversity, water use efficiency for food and agriculture and the implementation of such programmes as OIC programme on development of strategic commodities, the creation of a regional food security reserve, and leveraging the COMCEC project funding mechanism, among others should be taken into action for possibly decreasing the post COVID-19 effects on agriculture in OIC^{33,34}.

4.2.3. Effects of Post COVID-19 on Food Insecurity

The impacts of rising poverty and reduced livelihoods are reflected clearly in rising levels of food insecurity and decreasing diet quality. Dietary quality and diversity were affected foremost through declining incomes but also through trade and movement restrictions that have disproportionately affected the availability of nutritious perishable products in 2021. The households' dietary shift away from more expensive nutritious foods, such as fruits, vegetables,

³² IFPRI, COVID-19 Food Trade Policy Tracker, (2021); <https://www.iisd.org/system/files/2020-08/food-export-restrictions-worsen-food-crisis.pdf>

³³ IOFS (2020) <http://www.comcec.org/en/wp-content/uploads/2020/07/2-B-IOFS.pdf>

³⁴ IsDB (2020) <http://www.comcec.org/en/wp-content/uploads/2020/07/2-C-IsDB.pdf>

and animal-sourced foods, toward cheaper staple foods.³⁵ In addition, lockdowns increased food insecurity and nutrition through public sector channels.

(FAO SOFI) 2021 report estimated that between 720 and 811 million people in the world faced hunger in 2020 – as many as 161 million more than in 2019. Nearly 2.37 billion people did not have access to adequate food in 2020 – an increase of 320 million people in just one year. No region of the world has been spared and immune. The high cost of healthy diets and persistently high levels of poverty and income inequality continue to keep healthy diets out of reach for around 3 billion people in every region of the world. Moreover, new analysis showed that the increase in the unaffordability of healthy diets is associated with higher levels of moderate or severe food insecurity³⁶.

Additionally, food supply disruptions and the lack of income due to the loss of livelihoods and remittances as a result of COVID-19 means that households across the globe are facing increased difficulties to access nutritious foods and are only making it even more difficult for the poorer and vulnerable populations to have access to healthy diets. With the extra stimulus triggered by COVID-19, the cost of a healthy diet exceeded the international poverty line (established at USD 1.90 purchasing power parity (PPP) per person per day), making it unaffordable for the poor. The cost also exceeds average food expenditures in most countries in the Global South: around 57 percent or more of the population cannot afford a healthy diet throughout sub-Saharan Africa and Southern Asia.

Overall, these facts are very crucial for populations of OIC member states where rural population still represented more than 50 percent of the total population in 25 OIC member states, where food supply chains are fragile, having scarce health systems to tackle during the possible post-COVID-19 era.

The decline in food security and sound nutrition will have long-lasting development effects during post-COVID 19. It was projected that even short lockdown measures implemented in tandem with restrictions on mobility and food system disruptions would lead to a 7 to 9 % decrease in gross national income (GNI) in most low- and middle-income countries (LMICs), as compared with pre-pandemic projections. Applying these estimates to 118 LMICs (where there are OIC member states) suggested that moderate or severe wasting (low weight-for-height) among young children could increase by 14.3 percent, adding an estimated 6.7 million more wasted children in 2020³⁷.

The net effects of the pandemic have gradually emerged, and support and incentives have been developed for those who have suffered and whose food systems have been adversely affected. However, efforts to not only ensure food security but also to transform food systems post-COVID-19 are becoming increasingly challenging in OIC member countries. Rising energy and input costs, the rapid increase and peak in food prices are exacerbating the food security challenge.

³⁵ Wourterse F., S. Murphy, and J. Porciello, "Social Protection to Combat Hunger," *Nature Food* 1 (2020): 517–518.

³⁶ Fans et. al. (2021) <https://www.annualreviews.org/doi/10.1146/annurev-resource-101520-081337>

³⁷ Headey et al. (2020). [https://doi.org/10.1016/S0140-6736\(20\)31647-0](https://doi.org/10.1016/S0140-6736(20)31647-0)

4.2.4. Differences and Shortcomings to Transform Food systems in post COVID-19 Era

Although with overall lower risks, some countries in OIC faced disruptions from the supply side, given the high integration to the global food chain and capital-intensive agriculture systems. Disruptions on the supply of inputs following shocks on trade and logistics contract agriculture production in the short term. During the COVID-19, blockages to transport routes were particularly obstructive for fresh food supply chains and resulted in increased levels of Food Loss and Waste (FLW). Countries that cannot take measures against agriculture and food loss and waste from field to fork need serious work. In the post-COVID-19 era (i.e., medium to long-term) the confidence in global value chains may be further eroded particularly in the trade of agricultural products. In some cases, disruptions and delays in the agricultural trade may also lead to a breakdown of regional and global value chains that could further reduce the global agricultural trade volume substantially.

The pandemic has been an important alert for increased vulnerability of the poor and similar disadvantaged groups. Wealthier households in LMICs generally experienced larger percentage declines in income, primarily due to working in industry and service jobs that were disrupted by COVID-19 shocks and restrictions. Poor households, however, suffered far more detrimental impacts on food security, livelihoods, and wellbeing. Because these households spend a larger share of income on food, so loss of income increased their food insecurity, and they have fewer assets to help them mitigate shocks. Food security and livelihoods were most negatively impacted in places where food value chains were poorly integrated. Agriculture and agri-food systems in OIC have been more resilient, both because consumers prioritize food when incomes decline and because agri-food systems were generally exempted from lockdowns and movement restrictions³⁸.

Disadvantaged groups, due to the economic, legal, and social barriers they already faced and their reliance on informal work have suffered most during the pandemic. Women account for 39 percent of employment globally but incurred 54 percent of total job losses during the pandemic, reflecting their heavy representation in informal activities³⁹.

The digital divide between rich and poor have also increased during the pandemic where post-COVID-19 era will certainly leave poor communities into more isolation relatively compared with rich communities. These impacts may be long-lasting in post-COVID-19 era; for example, disruptions in schooling will likely lead to lower lifetime earnings, poorer health, and less opportunity for many children in developing countries to escape from poverty.

In addition to the already listed gaps; there are important regional and national differences in policy reactions, demographics, food and economic system structures, and how these influence the pandemic's impacts on citizens. How the post-pandemic will evolve in different regions, among OIC and its long-term impacts on food systems and agriculture are still unknown; we have just snapshots and dramatic experience learned from 2020 to 2021.

³⁸ Swinnen j. and J. McDermott, "Covid-19 and Global Food Security," *EuroChoices* 19, no. 3 (2020): 26–33.

³⁹ Madgavkar et al. (2020). <https://www.mckinsey.com/featured-insights/future-of-work/covid-19-and-gender-equality-counteracting-the-regressive-effects>

Countries in South Asia, for example, initiated strict lockdown measures at the earliest stage of the pandemic, keeping COVID-19 cases low, and spent sizable resources on their already-large social protection networks, on support to agriculture, and on maintaining food price stability. But the region's labor markets, especially in the non-farm and informal sectors, proved to be fragile, due to their reliance on migrant workers. The drastic reduction in international remittances was also a big blow.

Similarly, countries in East and Southeast Asia suffered from the loss of international and domestic remittances, with rural households suffering the most. The region has also faced a challenge in reaching the urban poor, many of whom work in the informal sector and are not covered by existing social protection systems. Expansion of regional trade, however, has helped East Asian countries mitigate the impacts of global trade restrictions; many exports.

Central Asian countries quickly enacted policy measures to contain the virus, but still experienced a contraction in GDP, closure of SMEs, and isolation of some segments of society, especially in rural areas with poor digital connectivity. The pandemic also exposed the weaknesses of many of the region's economies, including dependence on remittances and on a few trading partners and commodities subject to price volatility. Fortunately, agricultural growth remained relatively robust and intra-regional trade mitigated some of the pandemic's effects.

Africa south of the Sahara has recorded relatively few COVID-19 deaths, but short-term policy responses and the global recession have interrupted 25 years of economic growth, with decreased in household incomes, lost employment, increased poverty and food insecurity. Some countries were able to invest heavily in social protection measures, but rates of coverage remained low compared to the global average, and the high costs of pandemic-response programs may risk a fiscal crisis.

Finally, in the Middle East and North Africa region, the pandemic led to falling remittances and incomes, especially in the service and industry sectors. Food services and tourism-related businesses suffered the most severe disruptions, disproportionately harming urban dwellers employed in those sectors, while other parts of the agri-food system have proved more resilient. The travel and tourism related jobs were cut by 18% (-61.6 million in 2021) where 1 out of 4 net new jobs were created by this sector during 2014-2019 (pre-pandemic) period⁴⁰. In particular, the fact that agricultural products are products of absolute necessity has created years in which attitudes and behaviors towards food have become important in this process. Measures were taken to utilize the limited production within the country. Asian countries are seen as lucky in this field. They have ensured food security through imports, albeit limited with the effect of income.

4.3. Transforming Food Systems After COVID-19: Opportunities

Despite the many negative impacts of the pandemic, the health, economic, and food disruptions have opened opportunities for a fundamental change. *Health is a precondition for economic recovery; and food is a precondition for health.* COVID-19 magnified many long-term weaknesses, such as persistent inequalities and poorly integrated food supply chains, and its sustainability

⁴⁰ COMCEC (2021). <https://www.comcec.org/wp-content/uploads/2021/10/1.pdf>

that must be addressed. But it also highlighted the benefits of investments and policies that have created an enabling environment for private sector innovation, with flexible markets and appropriate infrastructure, and of sound policy systems that are able to respond quickly.

If small enterprises in agricultural value chains are further shut-down, the problems of food access and food availability would intersect, creating a nightmare scenario to the world which is already ill-equipped to handle. In a post-COVID-19 era exports can mitigate losses in revenues and imports can improve food availability and stabilize local food prices. In both exporting and importing countries, access to various markets can boost producers' productivity and income. Finally, countries have to accelerate intraregional trade.

As of November 2021, there is considerable hope that the rapid development and deployment of effective vaccines will relieve the disease threat. 406 million people are fully vaccinated among OIC out of 3.1 billion in the world. Around 1 OIC member citizen is fully vaccinated every 0.026 seconds. However, the emergence of new coronavirus variants, the difficulty of ensuring an adequate supply of vaccines, and the challenge of vaccinating all people, particularly the poor, is almost certain to prolong recovery in many places. Although it seems increasingly likely that the world will have to learn to live with the virus-post i.e., COVID-19, its impact will ebb, allowing attention to focus on the longer-term agenda of transforming food systems to be healthier and more efficient, sustainable, inclusive, secure and resilient⁴¹.

COVID-19, like other crises, has triggered reactions from governments, the private sector, farmers, consumers, and the international development community, many of whom altered their roles, operations, and behaviors in ways that were previously constrained by a variety of political, social, technical, and economic barriers. This normalization of out-of-the-box approaches has fundamentally changed thinking about the potential of food system transformation, making this the right time for the deep changes that are needed.

Upcoming global summits and new thinking have the potential to be catalytic (i.e., *The 26th United Nations Climate Change Summit (COP26)*, *The UN Food Systems Summit*, *The 37th Ministerial Session of the COMCEC*) but the real transformation must occur in regions, countries, and communities through policies, investments, and actions that adapt and build on past successes and address weaknesses. Financing these changes will also require innovative approaches and mechanisms from the global to the local level to support public and private sector investments in transformation.

Since the pandemic's onset, governments have adopted a variety of response policies, from increasing spending on health systems and vastly expanding social protection to supporting private businesses. Social protection efforts served to test the effectiveness of pro-poor interventions and policies. The OIC has deployed tremendous efforts to intensify joint Islamic action and solidarity in confronting the pandemic from the beginning: i) the convening of the Health Steering Committee meeting on April 9, 2020, ii) the Second Fiqh Medical Symposium of the International Islamic Fiqh Academy on April 16, 2020, iii) the Executive Committee meeting at the level of Foreign Ministers, held on April 22, 2020, and finally iv) COVID-19 Agriculture Consultative Meeting held on June 30th, 2020.

⁴¹ SESRIC (2021).

In addition; the OIC's institutions and financing organs have also adopted rapid response initiatives by allocating financial resources to Member States to contain the effects of the coronavirus pandemic and its economic and social impacts, notably the launching by the IsDB Group of a US\$ 2.3 billion strategic preparedness and response program to the benefit of many Member States, and ISF's US\$ 1 million emergency assistance fund to help Member States, especially to Least Developed Countries (LDCs). This is, in fact, in line with the objectives of the OIC Charter that calls for *cooperation and coordination among Member States in humanitarian emergencies*. Similar and new support mechanisms are also needed in the near future under the post-COVID-19 era among the OIC.

4.4. How to Build a More Resilient Future during post-COVID-19?

The innovations in the public and private sectors in response to COVID-19 are encouraging, but much more remains to be done in the post COVID-19 era. The pandemic was a test of resilience to a shock, and so for many countries, the end of the pandemic is not yet in sight, and other shocks — including new diseases, conflicts, natural disasters, and climate-change-induced disruptions, food crises, post-COVID-19 period — are likely to become more frequent.

Making food systems more resilient requires a set of actions, many of which must be adjusted to regional circumstances and food system characteristics. COVID-19 has disrupted food systems everywhere however it has also provided an unprecedented opportunity for innovation, a space in time when immediate needs have spurred responses never seen before, a platform on which to re-design food systems for the better. The below listed silver linings may prevent millions of people from facing outright starvation⁴².

- (i) First, the best way to build resilience into our food systems is through shock prevention, and when shocks can't be avoided, to limit the frequency and magnitude of shocks, i.e., increasing the resiliency. Some ongoing vulnerabilities, such as those due to climate change and inequality, were exacerbated during the pandemic. Therefore, investing in mitigating predicted multiple shocks could possibly reduce the likelihood and magnitude of various shocks, such as droughts and flooding, in the future. Another example is reducing inequality. Promoting inclusiveness in economic systems is likely to reduce or prevent social conflicts that are an important source of food insecurity and welfare declines during crises.
- (ii) Second, resilience implies the capacity to anticipate shocks, i.e. pro-active decision making. Information is crucial to help people, businesses, and governments prepare for shocks. Investments in early warning systems, development of improved data and indicators, and digital technology are examples of ways to increase access to information. In the case of COVID-19, dynamic metrics for tracking the transmission of the virus, including speed, acceleration, and persistence of COVID-19 cases, and indicators of the further possible impacts of policy responses and scenarios are useful. Similar indicators should be developed for tracking other potential shocks such as climate events, food price volatility, civil conflict, and pest infestations.
- (iii) Third, improving the capacity of all actors in our food systems to absorb shocks, i.e. preparedness; is the final piece of the resilience puzzle. Capacity building requires a

⁴² IFPRI 2020. <https://ebrary.ifpri.org/utils/getfile/collection/p15738coll2/id/133762/filename/133971.pdf>

variety of instruments, such as better access to finance (liquidity); flexible social safety nets; lower transaction costs in value chains; competitive markets for inputs, outputs, and logistics; reliable trade agreements; investment in rural services, infrastructure (including digital connections), and R&D for improving food production systems; and more. At the global and OIC levels, multilateral financial institutions will need to address the liquidity constraints of many developing countries. In this respect IsDB will continue to play a vital role. Small producers and SMEs will need further need access to credit, capital, and insurance to mitigate risks. Social safety nets can protect the most vulnerable people from shocks and also lead to gains in welfare and food and nutrition security. Conditional cash transfer programs, for example, have proven impacts on poverty reduction, household food consumption, and dietary diversity.

In sum, a wide set of measures are needed to make our food systems more resilient and sustainable. The pandemic has shown a harsh light on the vulnerabilities of our food systems, but has also proved that food systems can be resilient and that adaptations and innovations can be greatly accelerated. Food systems in developing countries have typically been less resilient and more vulnerable, causing the greatest harm to the poor and disadvantaged. Looking forward, measures for resilience need to be embedded in long-term transformation strategies to make food systems more efficient, inclusive, sustainable, and healthy. In addressing resilience, we must pay special attention to the most vulnerable households and communities in our food systems focusing on possible opportunity niches such as halal food trade, foreign direct investment and agricultural labor force for OIC. The development of self-renewing food systems against agricultural and food price increases related to increased migration, war and cost increases will be among the main issues of the next period.

A purposeful transformation of the food systems, globally and locally is required. 2021 and 2022 offered lessons, innovations, and opportunities that can help make food systems more resilient to future shocks and more inclusive, efficient, sustainable, and healthy. This could be achieved through careful research and analysis identifying the most effective measures for such a transformation and producing a series of evidence-based ideas and recommendations-supported by high-quality and science-based research. Some may be produced over a span of decades and some in the midst of the pandemic but all deposited enough experience for making such a transformation and governance possible under forthcoming post COVID-19 era. Global cooperation and the dissemination of scientific innovations combined with R&D will help to rationally solve the problems encountered in this process.

5. Agricultural Cooperation under the COMCEC

Agriculture is one of the most important cooperation areas of the COMCEC. It has been prioritized by the COMCEC Economic Summit held in November 2009 and 2022 in İstanbul. The COMCEC Strategy, adopted by the 4th Extraordinary Islamic Summit held on 14-15 August 2012 in Makkah, has also determined agriculture as one of the six cooperation areas of the COMCEC.

The COMCEC Strategy sets the “Increasing the productivity of agricultural sector and sustaining food security in the OIC Member Countries” as its strategic objective. The COMCEC Strategy also highlights the common challenges of the agriculture sector in the OIC member countries, among others, as the following:

- Low level of agricultural productivity,
- Lack of appropriate legal and regulatory framework,
- Low agro-industry investments,
- Poor basic infrastructure and related services
- Low level of agricultural mechanization,
- efficiency in the use of agricultural inputs
- Low level of research and development activities,
- Lack of reliable and up-to-date data

In order to address these challenges, the COMCEC Strategy, in its Agriculture Section, identifies four Output Areas (Increasing Productivity, Regulatory Framework and Institutional Capacity, Reliable and Up-to-date Data and Market Performance) as well as specific expected outcomes under them.

With the purpose of realizing the objectives and the expected outcomes of the cooperation areas, Working Groups (WG) have been formed under each cooperation area. The COMCEC Agriculture Working Group (AWG) has been established to achieve the objectives of the COMCEC Strategy in this context. Within the framework of the Strategy, the COMCEC Agriculture Working Group provides a regular platform for the member country experts to discuss their common issues, concerns and problems as well as to share experiences and good practices. Moreover, the AWG serves in developing a common understanding and approximating policies among the member countries in this crucial sector.

In this respect, the 1st meeting of the AWG was held in June 2013 with the theme of “Increasing Agricultural Productivity in the OIC Member Countries: Improving Irrigation Capacity”. The 2nd meeting was held in December 2013 with the theme of “Encouraging Foreign Direct Investments (FDIs) in the OIC Member Countries for Increasing Agricultural Productivity.” Furthermore, the 3rd meeting Agriculture WG was held in April 2014 in Ankara with the theme of “Improving the Statistical Capacity of the Agriculture Sector in the OIC Member Countries”. After that, the 4th meeting of the COMCEC Agriculture Working Group was held in September 2014 with the theme of “Facilitating Smallholder Farmers’ Market Access in the OIC Member Countries.” The COMCEC AWG gathered its 5th meeting with the theme of “Improving Institutional Capacity: Strengthening Farmer Organizations in the OIC Member Countries” in March 2015. The sixth Meeting was held in October 2015 with the theme of “Promoting Agricultural Value Chains in the OIC Member Countries.”

Moreover, given the importance of food losses in the Member Countries, the COMCEC AWG devoted its 7th, 8th and 9th Meetings to different dimensions of this subject which are respectively on-farm food losses, post-harvest food losses and food waste in the OIC Member Countries.

Food security is one of the most important challenges faced by the governments in the World as well as in the OIC Member Countries. In this respect, a well-functioning agricultural market performance is essential to ensure food security in the Member Countries. Given the significance of this issue, the 10th Meeting of the COMCEC AWG was held on September 28th, 2017 in Ankara, Türkiye with the theme of “Improving Agricultural Market Performance: Creation and Development of Market Institutions”. Following this meeting, the 11th Meeting of the AWG was held on February 22nd, 2018 in Ankara with the theme of “Improving Agricultural Market Performance: Developing Agricultural Market Information Systems”.

On the other hand, global trade in agricultural products has grown rapidly in recent decades and is also expected to grow further over the coming decades. International trade promotes

economic growth and creates welfare gains. But, many developing countries, including the OIC member countries, face serious difficulties that prevent them from fully reaping the benefits of international trade. To help the OIC member countries formulate effective measures and policies so as to make greater use of their potential as trading partners in global market as well as within the OIC markets for agricultural products, diverse needs and priorities of the Member Countries need to be examined. In this respect, the 12th Meeting of the COMCEC AWG was held on September 20th, 2018 with the theme of “Analysis of Agri-Food Trade Structures to Promote Agri-Food Trade Networks among the OIC Member Countries”. As a complementary to this meeting, the 13th Meeting of the Agriculture Working Group was held on February 21st, 2019 in Ankara with the theme of “Reviewing Agricultural Trade Policies to Promote Intra-OIC Agricultural Trade” and a research report on the same subject was considered by the WG. 14th AWG was held on 9-10 October 2019, in Ankara, with the theme of “Increasing the Resilience of the Food Systems in Islamic Countries in Face of Future Food Crises.” Based on the COVID 19 pandemic ‘The COMCEC COVID-19 Agriculture Consultative Meeting’ was held on June 30th, 2020 in a virtual-only format. In line with the relevant resolution of the 34th Ministerial Session of the COMCEC, the 14th Meeting of the AWG served as the preparatory platform for the Ministerial Exchange of Views Session of the 35th COMCEC Session that was held on November 27th, 2019 with the theme of “Sustainable Food Systems in the OIC Member Countries. Accordingly, the 15th Meeting of COMCEC Agriculture Working Group was also held on September 17th, 2020 in a virtual-only format, with the theme of “Good Governance for Ensuring Food Security and Nutrition in the OIC Member Countries”. 36th Ministerial Session of COMCEC was held on November 25-26, 2020 in a virtual only format. Regarding the upcoming period 37th Ministerial Session of COMCEC will be held on November 24-25, 2021 in a virtual only format.

In each meeting of the AWG, the research report prepared specifically on the theme of the meeting is considered by the AWG. “COMCEC Agriculture Outlook” reports are prepared and submitted to WG Meetings. As the outcome of the meeting, the WG comes up with concrete policy recommendations. In addition, Proceedings of these Working Group Meetings, which reflect the outcomes of the Meetings, are published by the CCO, following each WG Meeting. All the relevant publications and presentations are available on the COMCEC website (www.comcec.org and ebook.comcec.org).

Furthermore, the Member Countries having registered to the AWG have the chance to propose multilateral cooperation projects within the framework of the COMCEC Project Funding, which is another important implementation instrument of the Strategy. The projects to be financed under the COMCEC Project Funding need to serve multilateral cooperation and be designed in accordance with the objectives and the expected outcomes defined by the Strategy in its agriculture section. The projects also have important role in realization of the policy recommendations formulated by the member countries during the AWG meetings.

Conclusion

After examining the macro agricultural indicators, sectoral indicators and state of food security, it is evident that agriculture is still one of the prominent sectors in the OIC member countries. Even though agricultural activity in most OIC member countries has been slightly replaced by services and industrial activity over time, the significance of agriculture sector on national economies is still undeniable.

The value of agricultural production in the OIC member countries rose in the last decades due to increases in production as well as higher prices. Furthermore, the share of OIC agricultural production in the world agricultural production has an increasing trend. This achievement in agriculture sector can be explained by noteworthy rate of both agricultural and economy-wide growth in the OIC member countries that surpassed the world average during the period of 1994-2021.

Nonetheless, there still is an unused potential of agricultural sector in OIC member countries that could be utilized to increase agricultural value added and to sustain the food security. The need for productivity improvement in the most common, important and strategic crops such as wheat, maize and cotton seed, which play a crucial role in the OIC production, consumption and trade, is still valid. Moreover, millions of people in the Member Countries are facing undernourishment. COVID-19 pandemic increased the number of poor people globally by about 150 million, 20 percent above pre-pandemic poverty levels in 2021. Food systems, which directly employ over a billion people, lost more than 451 million jobs or 35% of formal employment.

Recent data show that food insecurity has already become one of the biggest problems in many OIC countries. The latest FAO data pointed out that on average 47.9% of the total population in OIC countries suffer food insecurity problems, quite higher than the world average of 25.4%. To make matters worse, several OIC countries in East Africa, are currently fighting their way to control the decade's worst desert locust swarms' outbreak, which threatens food security in the region. The occurrence of the pandemic could further amplify the deterioration of food security, if not handled with correct policy measures⁴³. Furthermore, after examining the related indicators with respect to all dimensions of food security such as availability, access, utilization and stability, it is clear that more efforts are still needed to enhance the state of food security level in member states.

At the sub-regional and individual country level, agriculture sector in the OIC member countries substantially differs. While there are countries with well performing agriculture sectors, many countries face considerable structural challenges and problems in their agriculture sector mainly arising from the agro-ecological conditions, lack of a modern agricultural infrastructure and inefficient input utilization.

Notwithstanding the structural issues mentioned above, the OIC member countries have also a great potential in agriculture especially for cross country investments. On the other hand, as the global demand for quality food is increasing, along with efforts for increasing quantity, quality related issues also need to be addressed adequately. Any efforts to reduce these productivity and market efficiency gaps already appeared between OIC member countries and the rest of the

⁴³ FAOSTAT (2021b) <http://www.fao.org/faostat/en/#data/FS>

World in different terms at this Publication could serve as a leverage for both food and nutrition security. In particular, exemplary practices can be used to increase resource utilization and land productivity and to disseminate agricultural systems to be applied in these areas.

The significance and severity of the pandemic, and its likely impact on agriculture worldwide, calls for substantial reflection in both the short- and long-term and among OIC member states. The immediate consequences of agricultural and food systems on the world rely so heavily for the global network is dramatically experienced under COVID-19. The unexpected risks, weaknesses and systemic shifts to understand post COVID-19 effects as well as those that may be long-lasting or permanent should be closely tracked.

With careful planning based on detailed studies and required allocations at national level and enhancing regional cooperation, experience sharing and mobilizing resources at international level, the challenges mentioned throughout the Outlook report can be addressed to a great extent. In this framework, the COMCEC Project Funding which offers grants for capacity building and experience sharing projects should be used efficiently. Inter-country cooperation and institutional solidarity should be a common goal. In today's technological structure and development, it can now take advantage of the ease of communication and information sharing.

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Annexes

Annex 1: The Official Regional Groups of the OIC Member States

African Group	Arab Group	Asian Group
Benin	Algeria	Afghanistan
Burkina Faso	Bahrain	Albania
Cameroon	Comoros	Azerbaijan
Chad	Djibouti	Bangladesh
Côte d'Ivoire	Egypt	Brunei Darussalam
Gabon	Iraq	Guyana
Gambia	Jordan	Indonesia
Guinea	Kuwait	Iran (Islamic Republic of)
Guinea-Bissau	Libya	Kazakhstan
Mali	Mauritania	Kyrgyzstan
Mozambique	Morocco	Malaysia
Niger	Oman	Maldives
Nigeria	Syrian Arab Republic	Pakistan
Senegal	Palestine	Suriname
Sierra Leone	Qatar	Tajikistan
Togo	Saudi Arabia	Türkiye
Uganda	Sudan	Turkmenistan
	Somalia	Uzbekistan
	Tunisia	
	United Arab Emirates	
	Yemen	

Annex 2: Value Added, Agriculture, Forestry and Fishing in the OIC Countries, Million US Dollars

Country Name	2000 [YR2000]	2005 [YR2005]	2010 [YR2010]	2015 [YR2015]	2019 [YR2016]	2020 [YR2017]
Benin	828.65	1,752.87	2,464.04	3,005.57	3,867.88	4,243.00
Burkina Faso	739.54	1,645.44	2,440.80	2,677.98	3,225.93	3,547.72
Cameroon	1,691.90	2,528.17	3,681.41	4,568.93	5,659.06	6,042.38
Chad	565.19	3,578.27	5,541.61	5,518.51	4,819.54	4,817.38
Côte d'Ivoire	2,684.76	3,861.58	6,109.98	8,412.58	12,100.81	..
Gabon	315.68	477.67	562.61	620.15	937.28	998.59
Gambia	192.07	329.80	543.13	306.08	398.03	..
Guinea	628.48	654.41	1,198.33	1,625.01	3,268.80	3,711.27
Guinea-Bissau	1,54.85	260.40	383.19	490.45	437.60	441.89
Mali	974.38	2,022.85	3,529.22	4,943.54	6,451.10	6,278.65
Mozambique	1,080.12	1,944.81	2,981.13	3,655.35	3,979.86	..
Niger	819.93	1,721.79	2,812.41	3,138.28	4,881.33	..
Nigeria	14,832.34	45,952.12	86,365.38	100,436.74	98,166.59	104,370.01
Senegal	988.52	1,671.21	2,570.59	2,538.69	3,492.78	3,940.33
Sierra Leone	349.82	815.20	1,364.88	2,474.36	2,239.81	2,368.92
Togo	455.95	833.88	985.60	1,019.04	1,426.40	1,422.26
Uganda	1,703.71	2,316.73	8,615.64	7,623.23	8,107.22	8,979.83
African Group	29,005.89	72,367.19	132,149.95	153,054.51	163,460.04	151,162.24
Algeria	4,599.68	7,937.30	13,648.52	19,218.25	21,189.98	20,653.52
Bahrain	..	..	76.54	98.19	108.67	..
Comoros	103.15	192.08	276.17	295.59	385.56	..
Djibouti	..	..	..	27.91	42.28	44.27
Egypt	15,512.99	12,527.79	29,214.08	37,528.23	33,487.33	41,783.13
Iraq	2,241.56	3,440.32	7,150.63	6,990.95	7,416.85	10,150.47
Jordan	170.51	347.25	970.09	1,694.85	2,186.27	2,273.25
Kuwait	133.96	243.49	520.94	615.82	523.79	..
Lebanon	1,076.62	769.53	1,484.69	1,689.24	1,597.81	836.04
Libya	..	1,188.09	..	..	..	..
Mauritania	441.83	589.26	941.88	1,272.19	1,421.28	1,410.79
Morocco	4,615.18	7,366.47	12,065.53	12,777.06	14,559.38	13,799.79
Oman	437.37	502.43	810.58	1,361.43	1,796.04	..
Palestine	417.60	460.80	871.60	1,035.20	1,208.60	..
Qatar	66.21	59.34	147.53	260.92	404.50	419.59
Saudi Arabia	9,326.25	10,579.05	13,946.13	17,137.87	17,709.62	17,941.03
Somalia	..	..	..	..	..	..
Sudan	4,986.58	8,116.20	15,299.65	20,793.25	7,019.49	5,461.65
Syrian Arab Republic	4,665.82	5,981.44	..	..	..	..
Tunisia	2,148.68	2,959.38	3,319.06	4,439.41	4,024.88	4,606.06
United Arab Emirates	2,360.79	2,520.35	2,212.39	2,653.78	3,077.88	..
Yemen	1,326.72	1,767.13	2,522.66	3,015.59	..	..
Arab Group	54,631.50	67,547.71	105,478.67	132,905.72	118,160.19	119,379.58
Afghanistan	..	1,931.96	4,156.02	4,107.70	4,972.08	5,350.59
Albania	853.22	1,517.43	2,141.58	2,252.34	2,822.43	2,849.24
Azerbaijan	848.12	1,211.66	2,933.59	3,278.74	2,743.71	2,950.88
Bangladesh	12,124.63	12,896.28	19,598.80	28,838.47	38,365.86	41,000.53
Brunei Darussalam	61.48	90.22	100.48	142.56	132.82	143.37
Guyana	213.68	238.27	979.36	1,088.92	910.34	921.97
Indonesia	25,873.16	37,524.88	105,178.67	116,151.99	142,266.72	145,045.71
Iran (Islamic Republic of)	9,938.24	14,722.52	31,639.53	40,361.02	31,459.16	24,555.55
Kazakhstan	1,483.62	3,638.51	6,677.72	8,685.70	8,113.87	9,039.17
Kyrgyzstan	468.27	700.76	836.53	939.00	1,034.81	1,044.88
Malaysia	8,065.00	11,859.21	25,730.96	24,974.78	26,460.51	27,626.95
Maldives	..	89.91	145.82	228.68	295.27	..
Pakistan	21,010.70	27,565.20	41,246.98	64,438.52	61,324.06	59,840.66
Suriname	90.40	88.22	413.78	533.56	365.78	..
Tajikistan	216.20	490.02	1,105.12	1,785.85	1,732.13	1,949.21
Türkiye	27,520.41	46,404.88	69,672.37	59,364.51	48,908.12	47,552.25
Turkmenistan	654.69	1,501.81	2,561.05	3,331.71	4,881.14	..
Uzbekistan	4,135.85	3,767.32	13,397.93	25,187.17	14,745.96	15,043.47
Asian Group	113,557.66	166,239.06	328,516.28	385,691.25	391,534.76	384,914.43
OIC Total	197,195.05	306,153.97	566,144.91	671,651.47	673,154.99	655,456.26
World Total	1,124,864.89	1,514,778.16	2,533,379.22	3,166,932.53	3,526,771.49	3,686,330.48

Source: World Development Indicator

Annex 3: Agricultural GDP Share of Member Countries in the OIC, Percentage

Country Name	1995	2000	2005	2010	2015	2019
Benin	0.24	0.29	0.39	0.27	0.26	0.13
Burkina Faso	0.36	0.37	0.54	0.42	0.39	0.20
Cameroon	0.76	0.76	0.82	0.63	0.67	0.32
Chad	0.25	0.29	0.56	0.59	0.50	0.21
Côte d'Ivoire	1.31	1.26	1.26	1.05	1.11	0.49
Gabon	0.18	0.15	0.16	0.10	0.09	0.05
Gambia	0.16	0.19	0.11	0.09	0.05	0.02
Guinea	0.70	0.46	0.19	0.21	0.24	0.11
Guinea-Bissau	0.20	0.08	0.08	0.07	0.07	0.04
Mali	0.51	0.48	0.64	0.59	0.72	0.38
Mozambique	0.44	0.54	0.63	0.51	0.54	0.21
Niger	0.36	0.40	0.56	0.49	0.46	0.29
Nigeria	6.18	7.37	14.97	14.92	15.04	5.20
Senegal	0.53	0.50	0.53	0.44	0.37	0.22
Sierra Leone	0.26	0.20	0.27	0.23	0.37	0.14
Togo	0.21	0.20	0.23	0.18	0.15	0.07
Uganda	1.28	1.00	0.97	0.82	0.88	0.38
African Group	13.92	14.53	22.90	21.61	21.91	8.48
Algeria	2.00	2.31	2.59	2.35	2.83	2.89
Bahrain	0.02	0.03	0.02	0.01	0.01	0.02
Comoros	0.07	0.08	0.09	0.05	0.04	0.07
Djibouti	0.01	0.01	0.01	0.01	0.00	0.01
Egypt	5.07	6.18	4.20	4.92	5.34	5.86
Iraq	0.37	0.48	1.12	1.23	1.03	1.12
Jordan	0.17	0.12	0.16	0.19	0.29	0.24
Kuwait	0.05	0.07	0.08	0.09	0.09	0.09
Lebanon	0.29	0.38	0.25	0.25	0.25	0.31
Libya	1.02	1.32	0.36	0.35	0.02	0.47
Mauritania	0.33	0.22	0.20	0.16	0.19	0.23
Morocco	2.53	2.29	2.40	2.07	1.88	2.45
Oman	0.19	0.22	0.14	0.14	0.22	0.21
Palestine	0.32	0.35	0.15	0.15	0.15	0.22
Qatar	0.04	0.03	0.02	0.03	0.04	0.04
Saudi Arabia	4.05	4.63	3.45	2.40	2.53	3.45
Somalia	0.34	0.56	0.40	0.10	0.11	0.26
Sudan	2.48	2.48	2.64	3.93	3.95	3.95
Syrian Arab Republic	1.83	2.42	1.88	2.05	0.58	1.76
Tunisia	0.92	1.07	0.96	0.57	0.65	0.86
United Arab Emirates	0.51	1.06	0.74	0.38	0.39	0.60
Yemen	0.49	0.65	0.59	0.64	0.70	0.73
Arab Group	23.09	26.94	22.44	22.05	21.31	25.82
Afghanistan	1.02	1.00	0.74	0.77	0.66	0.89
Albania	0.65	0.42	0.49	0.37	0.33	0.47
Azerbaijan	0.37	0.42	0.39	0.50	0.48	0.52
Bangladesh	4.61	5.56	3.63	3.35	4.24	4.66
Brunei Darussalam	0.03	0.03	0.03	0.02	0.02	0.03
Guyana	0.16	0.14	0.10	0.06	0.08	0.11
Indonesia	16.08	12.41	11.86	18.08	17.12	18.39
Iran (Islamic Republic of)	6.93	4.78	4.80	5.49	6.08	6.51
Kazakhstan	1.22	0.74	1.19	1.15	1.28	1.34
Kyrgyzstan	0.29	0.23	0.23	0.14	0.14	0.21
Malaysia	5.53	4.01	3.86	4.42	3.68	4.78
Maldives	0.02	0.02	0.03	0.03	0.03	0.03
Pakistan	9.58	10.42	8.76	6.98	9.37	10.00
Suriname	0.12	0.12	0.08	0.07	0.06	0.09
Tajikistan	0.20	0.11	0.16	0.19	0.25	0.23
Türkiye	12.55	13.67	15.12	11.97	8.75	13.32
Turkmenistan	0.17	0.56	0.86	0.44	0.49	0.58
Uzbekistan	3.47	3.89	2.34	2.31	3.71	3.54
Asian Group	62.99	58.54	54.66	56.33	56.78	65.70
OIC Total	100.00	100.00	100.00	100.00	100.00	100.00

Source: World Development Indicator

Annex 4: Total GDP/Breakdown at Current Prices in Million US Dollars

Country Name	2000	2005	2010	2015	2019	2020
Benin	3,519.99	6,567.65	9,535.35	11,388.16	14,391.69	15,651.55
Burkina Faso	2,968.37	6,146.35	10,109.62	11,832.16	15,990.80	17,369.06
Cameroon	10,109.05	17,951.22	26,169.32	30,928.65	39,007.35	39,802.15
Chad	1,388.51	6,649.31	10,668.10	10,950.39	11,314.95	10,093.12
Côte d'Ivoire	10,743.71	17,091.72	24,908.78	45,814.64	58,539.42	61,348.58
Gabon	5,080.48	9,582.78	14,372.59	14,383.11	16,874.45	15,593.18
Gambia	782.92	1,027.70	1,543.29	1,378.18	1,826.07	1,901.93
Guinea	2,995.36	2,937.07	6,853.47	8,794.20	13,513.81	15,681.05
Guinea-Bissau	371.10	587.03	849.88	1,048.23	1,439.64	1,431.76
Mali	2,961.48	6,247.52	10,689.17	13,104.76	17,281.82	17,393.76
Mozambique	5,656.47	8,542.07	11,104.65	15,950.97	15,291.45	14,021.42
Niger	2,241.75	4,383.32	7,851.19	9,685.58	12,911.69	13,678.23
Nigeria	69,448.76	176,134.09	361,456.62	486,803.30	448,120.43	432,293.78
Senegal	6,046.73	11,069.29	16,121.31	17,774.77	23,306.21	24,910.90
Sierra Leone	635.87	1,650.49	2,578.03	4,218.72	4,121.73	3,865.02
Togo	1,491.89	2,281.48	2,329.46	4,180.87	7,220.40	7,574.64
Uganda	6,193.25	9,239.22	26,558.91	32,248.12	35,170.04	37,372.03
African Group	132,635.68	288,088.32	544,799.74	720,484.80	736,321.95	729,982.15
Algeria	54,790.38	103,198.25	161,207.31	165,979.17	171,157.80	145,163.90
Bahrain	9,062.90	15,968.72	25,713.27	31,050.64	38,474.52	..
Comoros	351.14	653.85	907.98	966.03	1,165.84	1,219.69
Djibouti	551.23	708.63	1,128.61	2,430.29	3,324.63	3,384.40
Egypt	99,838.54	89,600.67	218,983.67	329,366.58	303,080.87	363,069.25
Iraq	48,364.25	49,954.89	138,516.72	166,774.11	222,434.14	167,224.43
Jordan	8,460.42	12,588.67	27,133.80	38,587.02	44,502.90	43,697.66
Kuwait	37,712.84	80,798.63	115,419.40	114,567.30	136,196.76	..
Lebanon	17,260.36	21,497.34	38,443.91	49,939.37	51,991.63	33,383.25
Libya	38,270.21	47,334.15	74,773.44	27,842.13	52,091.15	25,418.46
Mauritania	1,779.52	2,936.02	5,628.88	6,166.86	7,600.65	7,778.53
Morocco	38,857.25	62,343.02	93,216.75	101,179.81	119,700.33	112,870.59
Oman	19,507.45	31,081.99	56,913.07	68,420.26	76,331.52	..
Palestine	4,313.60	5,125.70	9,681.50	13,972.40	17,133.50	15,561.30
Qatar	17,759.89	44,530.49	125,122.31	161,739.96	175,837.55	146,373.59
Saudi Arabia	189,514.93	328,459.70	528,207.33	654,269.90	792,966.84	700,117.87
Somalia	..	..	..	4,048.86	4,942.32	4,917.61
Sudan	12,257.42	26,524.54	65,634.00	64,458.52	32,250.45	26,110.83
Syrian Arab Republic	19,325.89	28,858.97	..	..	..	..
Tunisia	21,473.26	32,273.01	44,050.93	43,173.53	39,195.72	39,235.67
United Arab Emirates	104,337.37	180,617.47	289,787.34	358,135.06	421,142.27	..
Yemen	9,652.44	16,746.34	30,906.75	42,445.10	..	..
Arab Group	753,441.31	1,181,801.04	2,051,376.97	2,445,512.90	2,711,521.38	1,835,527.03
Afghanistan	..	6,209.14	15,856.57	19,907.11	19,291.10	19,807.07
Albania	3,480.36	8,052.08	11,926.93	11,386.85	15,286.61	14,799.62
Azerbaijan	5,272.80	13,245.72	52,909.29	53,074.37	48,174.24	42,607.18
Bangladesh	53,369.79	69,442.94	115,279.08	195,078.68	302,563.40	324,239.18
Brunei Darussalam	6,001.15	9,531.40	13,707.37	12,930.39	13,469.42	12,016.06
Guyana	712.67	824.88	3,432.91	4,279.84	5,173.76	5,471.26
Indonesia	165,021.01	285,868.62	755,094.16	860,854.24	1,119,091.26	1,058,423.84
Iran (Islamic Republic of)	109,591.71	226,452.14	486,807.62	384,951.48	258,245.50	191,718.27
Kazakhstan	18,291.99	57,123.67	148,047.35	184,388.43	181,667.19	169,835.43
Kyrgyzstan	1,369.69	2,460.25	4,794.36	6,678.18	8,871.02	7,735.98
Malaysia	93,789.74	143,534.10	255,016.61	301,354.80	364,681.37	336,664.44
Maldives	624.34	1,163.36	2,588.18	4,109.45	5,642.18	4,030.20
Pakistan	82,017.74	120,055.29	177,165.64	270,556.13	278,221.91	263,686.55
Suriname	947.67	1,793.39	4,368.40	5,126.29	4,221.37	3,807.92
Tajikistan	860.52	2,312.33	5,642.18	8,271.45	8,300.78	8,194.15
Türkiye	274,302.96	506,308.31	776,992.60	864,316.67	761,428.18	720,101.21
Turkmenistan	2,904.73	8,103.90	22,583.16	35,799.71	45,231.43	..
Uzbekistan	13,760.51	14,307.51	46,679.88	81,847.41	57,726.54	57,707.19
Asian Group	832,319.38	1,476,789.03	2,898,892.27	3,304,911.49	3,497,287.27	3,240,845.54
OIC Total	1,718,396.37	2,946,678.39	5,495,068.98	6,470,909.19	6,945,130.60	5,806,354.72

Source: World Development Indicator

Annex 5: Total GDP/Breakdown at Constant 2015 Prices in Million US Dollars

Country Name	1995	2000	2005	2010	2015	2020
Benin	3,459.84	4,424.71	5,358.77	6,470.20	11,379.54	14,451.97
Burkina Faso	3,722.79	5,103.96	6,949.55	9,081.84	11,823.21	15,313.25
Cameroon	13,204.01	16,365.53	20,281.41	24,076.82	30,905.25	35,589.76
Chad	2,778.59	3,173.49	6,331.20	9,323.29	11,690.46	11,156.63
Côte d'Ivoire	18,367.20	21,746.72	21,747.06	25,614.14	45,779.97	61,010.60
Gabon	10,024.03	9,974.63	10,471.04	11,138.79	14,372.29	15,335.08
Gambia	769.68	947.11	1,098.04	1,350.60	1,378.18	1,637.69
Guinea	4,225.04	5,255.19	6,113.31	7,025.02	8,794.20	12,934.61
Guinea-Bissau	675.58	697.61	755.80	891.10	1,047.44	1,255.51
Mali	2,175.37	3,680.18	5,328.31	8,812.01	13,094.85	17,255.44
Mozambique	3,393.82	5,218.77	7,863.75	11,292.44	15,950.98	17,959.23
Niger	3,881.39	4,545.61	5,668.02	7,037.67	9,676.54	12,639.74
Nigeria	155,089.30	180,242.48	274,838.72	387,073.77	494,582.60	501,810.97
Senegal	7,748.02	9,771.12	12,270.45	14,596.27	17,761.40	22,684.49
Sierra Leone	2,512.19	1,472.60	2,678.91	3,456.77	4,248.11	5,007.15
Togo	2,241.24	2,487.41	2,623.25	3,100.84	5,345.70	6,730.35
Uganda	7,317.26	10,003.08	14,391.87	23,568.29	29,296.83	35,672.31
African Group	243,580.37	287,110.23	406,774.44	555,919.84	729,142.56	790,464.79
Algeria	81,507.12	96,577.78	124,380.82	140,977.02	165,979.12	168,331.02
Bahrain	12,294.40	15,447.91	19,866.90	26,036.23	31,050.64	32,914.17
Comoros	611.89	664.15	743.38	743.17	965.64	1,173.78
Djibouti	764.13	790.32	926.82	1,465.68	2,445.48	3,212.83
Egypt	133,364.33	172,025.52	206,215.07	278,268.26	317,744.56	397,699.58
Iraq	32,111.27	94,172.86	94,053.31	120,516.49	166,774.10	170,857.96
Jordan	15,697.37	18,380.68	25,032.52	33,723.83	38,587.02	41,107.72
Kuwait	54,453.41	61,262.66	90,480.24	95,860.98	114,584.57	104,343.31
Lebanon	24,164.68	25,944.36	31,400.18	45,248.72	50,065.95	35,082.91
Libya	49,918.77	53,342.99	74,045.52	84,025.27	48,522.03	19,815.28
Mauritania	3,139.35	3,409.61	4,169.15	4,951.46	6,166.86	6,856.78
Morocco	39,780.04	47,996.49	61,194.68	81,273.86	101,179.31	112,988.15
Oman	34,607.87	40,805.21	42,605.36	54,762.46	68,399.66	70,150.43
Palestine	5,417.71	7,118.37	8,740.10	11,082.40	13,972.40	14,015.40
Qatar	20,364.56	34,624.46	51,250.22	117,318.22	161,739.96	161,395.03
Saudi Arabia	336,810.30	365,556.99	444,966.58	509,171.78	654,269.74	650,714.48
Somalia	864.53	952.19	1,114.59	1,264.75	1,454.78	1,581.13
Sudan	29,907.14	41,084.07	59,423.17	72,125.26	83,933.48	93,272.33
Syrian Arab Republic	20,842.49	24,926.62	31,872.92	40,497.24	19,966.56	20,677.32
Tunisia	19,937.53	26,143.65	31,649.40	39,518.39	43,172.98	42,240.00
United Arab Emirates	138,960.19	190,271.75	246,972.32	278,172.54	358,134.94	370,866.04
Yemen	23,093.13	34,504.30	44,671.73	53,157.46	26,660.30	20,625.65
Arab Group	1,078,612.20	1,356,002.95	1,695,774.98	2,090,161.44	2,475,770.08	2,539,921.29
Afghanistan	6,334.89	5,344.64	9,595.64	14,743.56	18,713.05	20,113.07
Albania	4,720.01	6,057.25	8,057.31	10,420.27	11,386.92	12,541.50
Azerbaijan	8,616.17	12,110.73	22,442.91	47,988.97	53,076.24	51,289.43
Bangladesh	63,503.64	81,859.36	106,643.90	143,126.60	194,465.98	274,358.20
Brunei Darussalam	10,622.55	11,348.60	12,574.66	12,994.55	12,930.30	13,426.61
Guyana	1,522.15	1,741.22	2,712.52	3,641.45	4,279.84	7,275.89
Indonesia	380,895.76	395,012.38	497,631.79	657,835.43	860,854.23	1,027,602.85
Iran (Islamic Republic of)	205,321.02	248,006.14	319,309.16	409,921.82	417,210.20	439,462.66
Kazakhstan	58,532.02	66,179.33	108,382.18	146,559.49	184,388.40	205,829.27
Kyrgyzstan	2,678.20	3,518.52	4,237.02	5,263.49	6,678.18	7,238.14
Malaysia	117,334.86	148,271.12	186,898.47	232,653.69	301,354.78	343,624.85
Maldives	1,407.65	1,950.61	2,105.91	3,116.69	4,109.42	3,600.45
Pakistan	123,847.81	145,375.88	185,487.36	219,391.78	267,035.29	319,589.01
Suriname	2,507.10	2,758.23	3,523.22	4,533.59	5,126.24	4,417.29
Tajikistan	2,698.91	2,700.97	4,287.81	5,871.84	8,271.43	11,622.63
Türkiye	337,254.82	413,825.56	525,474.60	614,169.14	864,313.96	1,015,323.48
Turkmenistan	10,159.51	12,638.96	16,205.79	27,867.26	36,051.60	31,202.83
Uzbekistan	23,994.19	29,098.93	37,957.97	57,079.89	81,847.41	102,863.72
Asian Group	1,361,951.26	1,587,798.44	2,053,528.21	2,617,179.51	3,332,093.49	3,891,381.86
OIC Total	2,684,143.83	3,230,911.62	4,156,077.63	5,263,260.80	6,537,006.13	7,221,767.94
World Total	42,210,614.33	48,226,361.14	56,441,311.62	64,866,918.50	75,182,901.43	81,902,106.72

Source: FAOSTAT

Annex 6: Total Population, Thousands

Country Name	1995	2000	2005	2010	2015	2020	2021
Benin	5,906	6,866	7,982	9,199	10,576	12,123	12,451
Burkina Faso	10,090	11,608	13,422	15,605	18,111	20,903	21,497
Cameroon	13,600	15,514	17,733	20,341	23,298	26,546	27,224
Chad	7,010	8,356	10,097	11,952	14,111	16,426	16,915
Côte d'Ivoire	14,200	16,455	18,355	20,533	23,226	26,378	27,054
Gabon	1,085	1,228	1,391	1,624	1,948	2,226	2,279
Gambia	1,129	1,318	1,544	1,793	2,086	2,417	2,487
Guinea	7,270	8,241	9,110	10,192	11,432	13,133	13,497
Guinea-Bissau	1,089	1,201	1,345	1,523	1,737	1,968	2,015
Mali	9,586	10,946	12,776	15,049	17,439	20,251	20,856
Mozambique	15,483	17,712	20,494	23,532	27,042	31,255	32,163
Niger	9,490	11,332	13,624	16,464	20,002	24,207	25,131
Nigeria	107,948	122,284	138,865	158,503	181,137	206,140	211,401
Senegal	8,690	9,798	11,090	12,678	14,578	16,744	17,196
Sierra Leone	4,304	4,585	5,646	6,416	7,172	7,977	8,141
Togo	4,226	4,924	5,612	6,422	7,323	8,279	8,478
Uganda	20,413	23,650	27,685	32,428	38,225	45,741	47,124
African Group	241,519	276,017	316,768	364,255	419,444	482,714	495,909
Algeria	28,758	31,042	33,150	35,977	39,728	43,851	44,617
Bahrain	564	665	889	1,241	1,372	1,702	1,748
Comoros	475	542	612	690	777	870	888
Djibouti	630	718	783	840	914	988	1,002
Egypt	62,334	68,832	75,524	82,761	92,443	102,334	104,258
Iraq	20,149	23,498	26,922	29,742	35,572	40,223	41,179
Jordan	4,589	5,122	5,766	7,262	9,267	10,203	10,269
Kuwait	1,606	2,045	2,270	2,992	3,836	4,271	4,329
Lebanon	3,528	3,843	4,699	4,953	6,533	6,825	6,769
Libya	4,949	5,358	5,799	6,198	6,418	6,871	6,959
Mauritania	2,314	2,630	3,024	3,494	4,046	4,650	4,775
Morocco	26,994	28,794	30,456	32,343	34,664	36,911	37,345
Oman	2,204	2,268	2,511	3,041	4,267	5,107	5,223
Palestine	2,475	2,922	3,320	3,786	4,270	4,803	4,923
Qatar	513	592	865	1,856	2,566	2,881	2,931
Saudi Arabia	18,639	20,664	23,816	27,421	31,718	34,814	35,341
Somalia	7,492	8,872	10,447	12,044	13,797	15,893	16,360
Sudan	24,095	27,275	30,950	34,545	38,903	43,849	44,909
Syrian Arab Republic	14,345	16,411	18,361	21,363	17,997	17,501	18,276
Tunisia	9,125	9,708	10,107	10,635	11,180	11,819	11,936
United Arab Emirates	2,415	3,134	4,588	8,550	9,263	9,890	9,991
Yemen	14,913	17,409	20,107	23,155	26,498	29,826	30,491
Arab Group	253,107	282,344	314,966	354,890	396,028	436,082	444,518
Afghanistan	18,111	20,780	25,654	29,186	34,414	38,928	39,835
Albania	3,188	3,089	3,011	2,913	2,881	2,838	2,812
Azerbaijan	7,685	8,049	8,392	9,054	9,649	10,110	10,145
Bangladesh	115,170	127,658	139,036	147,575	156,256	164,689	166,303
Brunei Darussalam	297	333	365	389	415	437	442
Guyana	761	747	746	749	767	787	790
Indonesia	196,934	211,514	226,289	241,834	258,383	273,524	276,362
Iran (Islamic Republic of)	61,443	65,623	69,762	73,763	78,492	83,993	85,029
Kazakhstan	15,816	14,884	15,147	16,322	17,543	18,754	19,003
Kyrgyzstan	4,560	4,898	5,163	5,448	5,957	6,592	6,694
Malaysia	20,488	23,194	25,691	28,208	30,271	32,366	32,776
Maldives	254	279	320	366	455	541	544
Pakistan	123,777	142,344	160,304	179,425	199,427	220,892	225,200
Suriname	442	471	499	529	559	587	592
Tajikistan	5,765	6,216	6,789	7,527	8,454	9,538	9,750
Türkiye	58,486	63,240	67,903	72,327	78,529	84,339	85,043
Turkmenistan	4,208	4,516	4,755	5,087	5,565	6,031	6,118
Uzbekistan	22,785	24,650	26,167	28,562	31,299	34,232	34,915
Asian Group	660,169	722,486	785,994	849,264	919,317	989,178	1,002,352
OIC Total	1,154,795	1,280,847	1,417,728	1,568,409	1,734,789	1,907,974	1,942,779
World Total	5,707,533	6,115,108	6,512,603	6,922,947	7,340,548	7,673,345	7,836,631

Source: World Development Indicator

Annex 7: Rural Population, Thousands

Country Name	1995	2000	2005	2010	2015	2020	2021
Benin	3,735	4,234	4,746	5,235	5,743	6,254	6,354
Burkina Faso	8,563	9,537	10,531	11,761	13,125	14,505	14,781
Cameroon	7,810	8,449	9,125	9,854	10,583	11,266	11,394
Chad	5,505	6,548	7,895	9,324	10,934	12,563	12,892
Côte d'Ivoire	8,348	9,354	10,052	10,815	11,742	12,739	12,937
Gabon	273	259	244	235	231	221	218
Gambia	639	687	741	795	850	904	915
Guinea	5,127	5,697	6,171	6,760	7,415	8,290	8,468
Guinea-Bissau	715	766	832	912	1,005	1,098	1,116
Mali	7,139	7,842	8,680	9,632	10,465	11,359	11,538
Mozambique	11,226	12,558	14,346	16,041	17,740	19,668	20,061
Niger	7,993	9,497	11,412	13,793	16,752	20,182	20,921
Nigeria	73,184	79,680	84,605	89,586	94,485	99,034	99,895
Senegal	5,248	5,847	6,464	7,129	7,892	8,686	8,839
Sierra Leone	2,822	2,951	3,561	3,923	4,244	4,553	4,610
Togo	2,929	3,304	3,637	4,011	4,387	4,735	4,802
Uganda	17,791	20,153	22,989	26,143	29,793	34,327	35,082
African Group	169,048	187,364	206,032	225,948	247,386	270,384	274,824
Algeria	12,654	12,442	11,990	11,678	11,582	11,518	11,484
Bahrain	65	77	103	141	151	179	181
Comoros	341	390	441	497	556	614	625
Djibouti	149	168	182	193	206	217	218
Egypt	35,646	39,374	43,028	47,158	52,891	58,553	9,571
Iraq	6,291	7,403	8,409	9,189	10,700	11,708	11,893
Jordan	1,000	1,113	1,183	1,010	903	876	860
Kuwait	1,606	2,045	2,270	2,992	3,836	0	0
Lebanon	536	538	628	627	777	756	738
Libya	1,188	1,265	1,329	1,360	1,331	1,327	1,323
Mauritania	1,418	1,628	1,751	1,866	1,979	2,077	2,095
Morocco	13,040	13,437	13,652	13,578	13,585	13,461	13,420
Oman	624	645	693	755	796	701	677
Palestine	737	819	894	979	1,052	1,118	1,132
Qatar	26	22	23	28	27	22	21
Saudi Arabia	3,976	4,164	4,530	4,913	5,335	5,470	5,475
Somalia	5,137	5,922	6,654	7,309	7,831	8,560	8,715
Sudan	16,329	18,412	20,810	23,114	25,717	28,391	28,925
Syrian Arab Republic	7,158	7,886	8,486	9,485	8,609	7,792	8,019
Tunisia	3,516	3,550	3,513	3,546	3,571	3,597	3,594
United Arab Emirates	524	619	814	1,361	1,327	1,281	1,269
Yemen	11,370	12,836	14,289	15,797	17,283	18,520	18,738
Arab Group	123,331	133,127	145,672	157,576	170,045	176,738	178,972
Afghanistan	14,194	16,192	19,830	22,258	25,878	28,797	29,353
Albania	1,947	1,800	1,604	1,394	1,226	1,075	1,041
Azerbaijan	3,673	3,913	3,995	4,219	4,370	4,408	4,385
Bangladesh	90,186	97,543	101,761	102,621	102,648	101,816	101,535
Brunei Darussalam	93	96	98	97	97	95	95
Guyana	539	532	539	550	565	576	578
Indonesia	125,888	122,674	122,328	121,125	120,631	118,597	118,034
Iran (Islamic Republic of)	24,432	23,597	22,632	21,667	20,912	20,264	20,114
Kazakhstan	6,971	6,534	6,595	7,047	7,510	7,939	8,015
Kyrgyzstan	2,903	3,169	3,341	3,524	3,826	4,162	4,208
Malaysia	9,078	8,819	8,582	8,205	7,806	7,392	7,310
Maldives	189	202	212	232	280	321	320
Pakistan	84,371	95,396	105,830	116,631	127,581	138,798	140,885
Suriname	150	158	166	178	190	199	200
Tajikistan	4,100	4,569	4,989	5,531	6,193	6,914	7,046
Türkiye	22,153	22,298	21,838	21,101	20,723	20,153	19,926
Turkmenistan	2,323	2,443	2,517	2,620	2,765	2,864	2,876
Uzbekistan	12,821	13,280	13,466	14,008	15,415	16,974	17,308
Asian Group	406,013	423,215	440,324	453,010	468,615	481,344	483,230
OIC Total	698,392	743,706	792,028	836,534	886,046	928,466	937,025
World Total	3,147,042	3,259,100	3,310,653	3,346,700	3,382,164	3,397,376	3,401,483

Source: World Development Indicator

Annex 8: Rural Population, as Percentage of Total Population

Country Name	1995	2000	2005	2010	2015	2020	2021
Benin	63.24	61.67	59.46	56.91	54.31	51.59	51.03
Burkina Faso	84.87	82.16	78.46	75.37	72.47	69.39	68.76
Cameroon	57.43	54.46	51.46	48.44	45.42	42.44	41.85
Chad	78.53	78.36	78.20	78.02	77.49	76.48	76.22
Côte d'Ivoire	58.79	56.85	54.77	52.67	50.56	48.29	47.82
Gabon	25.20	21.12	17.55	14.47	11.88	9.92	9.58
Gambia	56.64	52.13	47.98	44.34	40.77	37.42	36.78
Guinea	70.53	69.13	67.74	66.32	64.86	63.13	62.74
Guinea-Bissau	65.63	63.76	61.84	59.89	57.88	55.80	55.38
Mali	74.48	71.64	67.94	64.00	60.01	56.09	55.32
Mozambique	72.50	70.90	70.00	68.17	65.6	62.93	62.37
Niger	84.23	83.81	83.76	83.78	83.75	83.37	83.25
Nigeria	67.80	65.16	60.93	56.52	52.16	48.04	47.25
Senegal	60.39	59.68	58.29	56.23	54.14	51.88	51.40
Sierra Leone	65.57	64.37	63.08	61.14	59.17	57.08	56.63
Togo	69.30	67.09	64.82	62.47	59.90	57.20	56.64
Uganda	87.15	85.21	83.04	80.62	77.94	75.05	74.45
African Group	67.20	65.15	62.90	60.54	58.13	55.65	55.15
Algeria	44.00	40.08	36.17	32.46	29.15	26.27	25.74
Bahrain	11.61	11.63	11.58	11.37	11.00	10.49	10.38
Comoros	71.70	71.92	72.13	72.03	71.53	70.62	70.39
Djibouti	23.70	23.47	23.24	23.00	22.58	21.94	21.78
Egypt	57.19	57.20	56.97	56.98	57.22	57.22	57.14
Iraq	31.22	31.50	31.23	30.90	30.08	29.11	28.88
Jordan	21.79	21.73	20.52	13.91	9.74	8.58	8.37
Kuwait	1.90	1.00	0.00	0.00	0.00	0.00	0.00
Lebanon	15.18	14.00	13.37	12.67	11.89	11.08	10.91
Libya	24.01	23.61	22.92	21.95	20.73	19.31	19.01
Mauritania	61.30	61.91	57.89	53.41	48.91	44.67	43.87
Morocco	48.31	46.67	44.83	41.98	39.19	36.47	35.94
Oman	28.33	28.43	27.60	24.84	18.65	13.72	12.96
Palestine	29.78	28.03	26.94	25.85	24.63	23.28	23.00
Qatar	5.00	3.69	2.60	1.50	1.06	0.77	0.72
Saudi Arabia	21.33	20.15	19.02	17.92	16.82	15.71	15.49
Somalia	68.58	66.75	63.69	60.69	56.76	53.86	53.27
Sudan	67.77	67.51	67.24	66.91	66.11	64.75	64.41
Syrian Arab Republic	49.90	48.05	46.22	44.40	47.83	44.53	43.88
Tunisia	38.53	36.57	34.76	33.34	31.94	30.43	30.11
United Arab Emirates	21.68	19.76	17.74	15.91	14.33	12.95	12.70
Yemen	76.24	73.73	71.06	68.22	65.22	62.09	61.45
Arab Group	37.23	34.44	34.10	31.19	31.54	29.90	29.56
Afghanistan	78.38	77.92	77.30	76.26	75.20	73.97	73.69
Albania	61.09	58.26	53.27	47.84	42.57	37.89	37.03
Azerbaijan	47.79	48.61	47.61	46.59	45.29	43.60	43.22
Bangladesh	78.31	76.41	73.20	69.54	65.69	61.82	61.05
Brunei Darussalam	31.36	28.84	26.84	25.04	23.34	21.75	21.45
Guyana	70.86	71.31	72.18	73.37	73.56	73.21	73.10
Indonesia	63.92	58.00	54.06	50.09	46.69	43.36	42.71
Iran (Islamic Republic of)	39.76	35.96	32.44	29.37	26.64	24.13	23.66
Kazakhstan	44.08	43.90	43.54	43.17	42.81	42.33	42.18
Kyrgyzstan	63.65	64.70	64.71	64.69	64.22	63.14	62.85
Malaysia	44.31	38.02	33.41	29.09	25.79	22.84	22.30
Maldives	74.36	72.29	66.25	63.57	61.47	59.33	58.90
Pakistan	68.16	67.02	66.02	65.00	63.97	62.84	62.56
Suriname	33.92	33.56	33.32	33.66	33.94	33.85	33.78
Tajikistan	71.12	73.50	73.49	73.48	73.26	72.49	72.27
Türkiye	37.88	35.26	32.16	29.18	26.39	23.90	23.43
Turkmenistan	55.21	54.09	52.95	51.51	49.68	47.48	47.00
Uzbekistan	56.27	53.87	51.46	49.04	49.25	49.58	49.57
Asian Group	56.69	55.08	53.01	51.14	49.43	47.64	47.26
OIC Total	53.70	49.74	47.86	45.83	44.18	42.85	43.99
World Total	55.16	53.31	50.84	48.35	46.09	43.85	43.42

Source: World Development Indicators

Annex 9: Employment by Sector, Agriculture, Thousands

Area Name	2000	2005	2010	2015	2019
Benin	1,292.4	1,457.4	1,597.6	1,710.9	1,823.0
Burkina Faso	3,758.3	3,444.2	2,709.9	1,791.8	1,765.8
Cameroon	4,308.4	4,799.1	4,595.6	4,531.8	4,761.8
Chad	2,895.1	3,005.2	3,078.3	3,248.6	4,503.2
Côte d'Ivoire	2,516.3	2,910.8	3,383.8	3,945.4	3,305.5
Gabon	115.4	130.5	148.9	177.2	189.6
Gambia	130.4	147.5	162.0	181	192.2
Guinea	1,922.2	2,039.0	2,227.8	2,428.0	2,626.0
Guinea-Bissau	334.7	378.8	428.1	486.1	531.4
Mali	2,800.4	3,030.2	3,536.4	3,705.9	4,259.7
Mozambique	6,675.3	7,350.5	7,780.8	8,098.7	8,978.7
Niger	3,563.3	4,149.5	5,018.0	5,455.6	6,292.8
Nigeria	19,387.5	20,219.0	21,154.0	19,266.7	19,312.7
Senegal	1,217.3	1,220.8	1,189.7	1,169.6	1,194.2
Sierra Leone	1,112.1	1,345.8	1,358.5	1,339.3	1,407.7
Togo	1,024.3	1,157.3	1,249.0	1,304.9	1,366.5
Uganda	5,694.3	6,595.9	7,545.4	10,035.3	11,882.1
African Group	109,996.4	63,381.5	67,163.8	68,876.8	74,392.90
Algeria	1,384.9	1,559.5	1,182.4	1,078.8	1,070.7
Bahrain	4.9	6.0	7.7	8.3	9.6
Comoros	69	78.1	87.9	98.5	107.8
Djibouti	105.6	114.4	125.3	125.2	123.4
Egypt	5,405.4	6,399.0	7,072.2	6,630.8	6,545.6
Iraq	1,356.7	1,497.4	1,460.6	1,641.1	1,652.9
Jordan	46.9	49.2	58.5	67.3	69.4
Kuwait	24	30	39.1	47.8	47.7
Lebanon	210.2	248.5	236.2	300	306.1
Libya	308.1	331.6	332.4	372.4	372.9
Mauritania	419.9	451.8	485.7	533.6	578.9
Morocco	3,729.0	4,296.7	4,241.2	3,980.8	3,808.6
Oman	47.6	71.3	68.6	111.5	124
Palestine	86.3	91.1	85.8	79.2	60.2
Qatar	8.7	15.5	20.6	24	25.4
Saudi Arabia	371.5	309.1	389.1	759.4	325.3
Somalia	1,726.1	1,963.4	2,190.6	2,532.2	2,891.8
Sudan	3,447.2	3,694.8	3,760.2	3,797.2	4,137.2
Syrian Arab Republic	1,448.1	1,069.8	764.2	580.3	510.4
Tunisia	562.4	548.4	594.2	491.2	447.3
United Arab Emirates	135.9	146.3	205.1	128.5	94.2
Yemen	1,467.8	1,196.1	1,098.3	1,477.9	1,699.6
Arab Group	22,366.2	24,168.0	24,505.9	24,866.0	25,009.0
Afghanistan	2,937.5	3,575.6	3,472.3	3,831.0	4,074.1
Albania	578.3	514.1	448.6	443.8	426.6
Azerbaijan	1,277.1	1,442	1,603.2	1,680.3	1,733.9
Bangladesh	29,131.1	25,679.8	26,112.2	26,015.7	25,875.8
Brunei Darussalam	1.8	1.6	1.2	1.4	2.7
Guyana	60.4	53.3	52.2	48.4	47.9
Indonesia	41,920.5	41,067.7	42,708.7	39,329.7	36,784.4
Iran (Islamic Republic of)	4,161.3	5,266.4	3,995.3	4,067.5	4,438.2
Kazakhstan	2,448.3	2,407.6	2,314.4	1,563.7	1,367.6
Kyrgyzstan	1,010.5	803.9	719.6	690	513.9
Malaysia	1,697.1	1,542.2	1,687.4	1,766.0	1,569.9
Maldives	16.9	20.6	20.8	22.5	23.6
Pakistan	1,815.0	21,130.8	24,840.2	26,795.3	25,901.2
Suriname	9.3	13.3	13.6	14.3	15.1
Tajikistan	774.9	860.6	965.8	977.4	985.2
Türkiye	7,872.7	5,122.1	5,340.6	5,455	5,304.8
Turkmenistan	481.4	522.3	540.6	524.8	506.9
Uzbekistan	3,399.7	3,753.9	3,746.7	3,625.9	3,438.9
Asian Group	115,928.08	113,777.8	118,583.4	116,852.7	113,010.7
OIC	248,291.04	201,327.3	210,253.1	210,595.5	212,412.6
World	1,047,924.8	1,042,184.7	986,358.6	910,741.7	884,355.0

Source: ILO Estimates

Annex 10: Share of Agricultural Employment in Total Employment, Percent

Country Name	1995	2000	2005	2010	2015	2020
Benin	50.06	48.39	46.32	44.07	41.08	37.96
Burkina Faso	88.07	80.43	67.52	48.22	29.75	24.65
Cameroon	68.11	66.47	62.03	55	46.58	42.87
Chad	82.89	82.23	78.89	77.15	75.38	76.28
Côte d'Ivoire	52.40	51.14	49.9	47.45	43.5	39.27
Gabon	42.36	40.11	37.55	35.18	32.14	32.36
Gambia	37.22	35.37	33.39	30.89	29.39	26.57
Guinea	72.79	71.42	69.26	67.03	63.98	61.25
Guinea-Bissau	68.11	67.68	66.69	64.87	62.82	67.79
Mali	73.99	72.64	70.38	68.58	62.27	62.26
Mozambique	84.16	82.22	79.51	76.39	72.12	69.91
Niger	76.57	76.65	76.13	75.14	73.77	74.85
Nigeria	50.18	48.75	44.95	41.36	36.94	34.66
Senegal	48.36	46.32	42.34	38.19	33.33	29.43
Sierra Leone	71.85	70.65	68.14	64.16	58.06	54.4
Togo	49.44	48	46.68	44.17	38.68	37.16
Uganda	71.48	69.95	68.34	66.84	72.26	72.44
African Group	64.00	62.26	59.30	55.57	51.30	49.65
Algeria	24.13	22.34	18.54	11.87	10.38	9.71
Bahrain	2.05	1.65	1.35	1.08	1.08	0.97
Comoros	59.14	57.87	54.12	45.48	37.27	49.94
Djibouti	40.94	40.08	36.94	32.82	28.21	32.4
Egypt	33.99	29.63	30.94	28.28	25.82	23.29
Iraq	30.83	28.71	26.14	23.08	20.39	17.79
Jordan	4.65	4.19	3.98	3.38	2.88	3.04
Kuwait	2.07	2.4	2.71	2.42	2.08	1.96
Lebanon	20.22	18.78	16.86	14.45	12.81	13.39
Libya	28.53	26.54	23.64	20.56	18.75	18.75
Mauritania	41.90	41.04	38.41	35.94	32.97	50.61
Morocco	46.68	45.43	45.48	40.57	36.69	34.14
Oman	7.97	6.39	7.93	5.15	4.57	4.45
Palestine	14.69	14.06	15.03	11.81	8.66	5.92
Qatar	4.00	2.6	2.86	1.46	1.23	1.17
Saudi Arabia	7.06	6.12	4.15	4.16	6.1	2.31
Somalia	83.29	83.18	82.58	81.84	81.02	83.02
Sudan	52.94	51.55	49.04	45.68	41.25	39.72
Syrian Arab Republic	28.38	32.89	22.92	14.51	12.27	10.49
Tunisia	21.71	20.3	18.53	17.95	14.75	12.73
United Arab Emirates	8.00	7.9	5.19	3.38	2.01	1.37
Yemen	52.49	40.84	29.9	24.11	29.47	28.63
Arab Group	27.98	26.57	24.42	21.36	19.58	20.26
Afghanistan	64.30	65.84	62.15	54.58	47.07	42.35
Albania	56.36	52.82	47.38	42.08	41.28	36.09
Azerbaijan	43.31	41.01	39.32	38.23	36.36	35.51
Bangladesh	66.03	64.81	51.17	47.31	43.46	37.75
Brunei Darussalam	1.56	1.21	0.92	0.69	0.74	1.35
Guyana	30.10	24.66	21.64	20.05	16.92	16.81
Indonesia	43.98	45.28	44	39.13	33.04	27.73
Iran (Islamic Republic of)	23.99	24.4	24.75	19.22	18.03	17.82
Kazakhstan	37.62	36.44	32.41	28.28	18.01	15.45
Kyrgyzstan	47.19	53.08	38.5	32.24	29.31	20.38
Malaysia	19.97	18.36	14.64	13.3	12.47	10.09
Maldives	20.87	18.96	17.23	13.21	9.83	8.24
Pakistan	44.05	43.01	43.07	43.39	41.01	35.89
Suriname	7.29	6.58	8.49	8.04	7.69	7.45
Tajikistan	58.04	59.42	55.2	52.55	48.56	44.19
Türkiye	29.12	27.3	24.8	23.7	20.41	18.02
Turkmenistan	34.54	34.28	32.85	29.36	24.52	19.5
Uzbekistan	41.24	39.08	33.69	26.81	27.58	23.3
Asian Group	37.20	36.47	32.90	29.57	26.46	23.22
OIC Mean	43.06	41.77	38.87	35.50	32.44	31.04
World Total	41.34	40.06	37.11	33.20	29.18	27 (2019 data)

Source: ILO Estimates

Annex 11: Agricultural Products Total Export Value, Thousand US Dollars

Country Name	1995	2000	2005	2010	2015	2020
Benin	203,555	176,757	259,501	591,291	404,209	649,189
Burkina Faso	36,985	112,634	274,707	363,283	636,159	563,639
Cameroon	559,736	364,256	603,536	1,105,349	1,283,783	1,157,531
Chad	167,763	128,219	100,513	68,916	112,015	114,991
Côte d'Ivoire	2,177,945	1,898,336	2,949,942	5,448,474	7,436,497	8,339,616
Gabon	9,349	10,648	43,156	48,555	29,964	53,793
Gambia	15,256	13,102	17,110	26,542	19,293	4,700
Guinea	71,318	30,333	72,494	91,744	112,458	158,977
Guinea-Bissau	21,360	51,175	86,161	57,858	212,293	119,281
Mali	270,006	253,740	320,975	210,092	461,057	709,688
Mozambique	55,668	61,906	138,799	418,365	643,743	517,116
Niger	61,299	86,117	68,870	165,753	115,329	190,258
Nigeria	406,414	321,511	652,180	1,142,123	1,308,769	1,507,666
Senegal	113,709	161,408	133,513	343,982	649,908	755,729
Sierra Leone	13,955	4,856	15,057	31,374	57,042	65,104
Togo	127,057	77,483	94,985	279,716	222,091	304,650
Uganda	473,969	256,067	404,725	800,326	1,279,716	1,522,624
African Group	4,785,344	4,008,548	6,236,224	11,193,743	14,984,326	16,734,552
Algeria	105,900	27,656	89,353	131,309	284,411	485,824
Bahrain	104,797	32,744	45,826	292,429	371,158	301,186
Comoros	6,847	6,377	12,837	12,387	11,165	12,943
Djibouti	4,559	3,492	15,908	79,946	59,136	149,960
Egypt	519,964	491,920	1,139,194	2,890,424	4,378,139	5,169,846
Iraq	6,995	6,245	30,451	40,382	143,197	119,787
Jordan	221,404	235,309	563,066	1,062,378	1,548,875	1,120,583
Kuwait	33,278	52,439	56,745	122,051	507,445	388,446
Lebanon	101,512	136,447	288,905	515,376	738,251	712,023
Libya	58,393	55,044	6,866	7,175	15,900	19,133
Mauritania	48,102	13,061	15,760	43,002	31,818	19,606
Morocco	773,722	684,447	1,315,574	1,934,634	2,582,562	4,211,640
Oman	238,202	327,969	418,245	750,788	1,381,417	635,997
Palestine	39,236	77,763	53,159	59,119	108,040	102,529
Qatar	16,789	7,480	28,346	16,865	170,310	25,703
Saudi Arabia	445,898	471,767	1,239,212	2,948,961	3,658,789	3,517,415
Somalia	114,032	109,543	111,178	164,198	533,731	256,938
Sudan	476,994	373,014	503,942	461,514	1,923,568	1,470,323
Syrian Arab Republic	737,762	655,313	846,491	2,543,658	310,822	659,022
Tunisia	466,567	427,876	953,526	1,145,255	1,900,376	1,341,000
United Arab Emirates	680,306	821,958	2,371,572	3,997,912	7,227,746	13,128,750
Yemen	75,884	67,085	139,880	118,514	185,556	192,406
Arab Group	5,277,143	5,084,949	10,246,036	19,338,277	28,072,412	34,041,060
Afghanistan	49,596	43,095	78,944	277,114	403,103	698,943
Albania	14,595	22,402	40,142	56,171	104,012	157,742
Azerbaijan	37,070	50,431	329,476	513,609	491,151	893,493
Bangladesh	127,218	99,359	202,489	364,906	603,408	637,555
Brunei Darussalam	8,853	557	1,216	811	3,893	3,756
Guyana	199,686	179,994	176,097	352,528	378,121	338,843
Indonesia	5,472,319	4,911,812	10,855,629	30,538,042	32,774,136	36,624,288
Iran (Islamic Republic of)	962,210	976,199	2,065,694	5,358,311	3,700,782	2,923,508
Kazakhstan	649,212	700,699	795,063	1,842,833	2,138,905	3,275,913
Kyrgyzstan	135,410	92,785	129,055	219,090	166,166	267,441
Malaysia	8,186,804	5,750,960	10,541,594	23,678,894	22,311,397	23,349,784
Maldives	„	75	10	3	17	785
Pakistan	1,008,576	1,040,655	1,627,885	3,329,452	4,335,347	3,983,851
Suriname	44,972	54,976	28,057	87,440	82,956	110,927
Tajikistan	202,940	122,525	196,904	224,867	148,013	171,897
Türkiye	4,147,473	3,560,499	7,602,413	11,621,800	16,166,727	19,595,122
Turkmenistan	474,564	168,942	180,442	218,387	341,884	97,197
Uzbekistan	1,981,254	927,997	1,509,656	1,279,970	1,127,212	1,712,980
Asian Group	23,702,752	18,703,962	36,360,766	79,964,228	85,277,230	94,844,025
OIC Total	33,765,239	27,797,459	52,843,026	110,496,248	128,333,968	145,619,637
World	435,458,202	403,325,855	641,670,611	1,065,445,743	1,274,889,546	1,492,211,093

Source: FAOSTAT

Annex 12: Agricultural Products Total Import Value, Thousand US Dollars

Area Name	1995	2000	2005	2010	2015	2020
Benin	159,672	174,628	254,271	449,657	947,317	768,908
Burkina Faso	182,221	173,168	246,319	303,351	407,026	468,027
Cameroon	163,445	241,094	457,986	741,904	941,329	1,132,902
Chad	52,388	41,922	85,228	163,343	199,700	194,975
Côte d'Ivoire	443,000	358,278	712,446	1,281,567	1,488,190	2,032,100
Gabon	154,999	166,089	263,855	429,598	611,392	498,054
Gambia	82,825	71,250	154,842	177,779	148,744	159,272
Guinea	244,606	150,620	267,312	422,304	565,480	1,078,228
Guinea-Bissau	31,447	43,044	56,401	90,262	117,448	152,724
Mali	113,323	109,769	252,914	389,062	627,260	641,136
Mozambique	264,080	225,207	448,042	789,584	850,428	1,225,670
Niger	106,784	114,246	259,757	343,066	497,388	922,142
Nigeria	1,109,341	1,125,505	2,617,155	5,605,488	6,394,002	6,029,805
Senegal	446,969	384,502	840,715	1,175,485	1,373,467	1,906,702
Sierra Leone	132,789	114,568	113,104	179,342	396,689	415,286
Togo	70,109	46,324	89,997	229,901	237,146	347,111
Uganda	150,002	128,371	338,030	579,471	676,910	940,346
African Group	3,908,000	3,668,585	7,458,374	13,351,164	16,479,916	18,913,388
Algeria	3,197,574	2,551,608	3,829,701	6,097,290	9,950,033	9,229,141
Bahrain	322,013	415,983	634,879	1,207,921	1,902,500	1,665,244
Comoros	29,661	14,985	40,208	68,535	197,297	114,122
Djibouti	96,608	136,585	206,547	473,764	1,131,697	1,135,109
Egypt	3,323,322	3,475,516	3,947,279	11,631,476	13,117,965	13,207,645
Iraq	1,062,208	1,920,113	2,915,242	6,294,535	8,186,180	11,172,093
Jordan	755,789	829,935	1,383,780	2,474,736	3,786,243	3,939,591
Kuwait	1,199,736	1,243,408	1,519,733	2,321,150	4,908,799	5,437,273
Lebanon	1,176,101	1,081,283	1,360,418	2,716,201	3,277,400	2,194,890
Libya	1,242,274	1,192,048	1,258,998	2,222,170	3,460,580	3,441,236
Mauritania	119,108	167,365	173,994	341,752	834,077	855,123
Morocco	1,783,797	1,642,690	2,273,280	4,148,962	4,194,862	6,524,901
Oman	827,389	1,042,657	1,044,705	2,322,708	3,500,630	4,064,469
Palestine	303,222	521,017	531,248	583,913	1,071,957	975,507
Qatar	321,519	376,654	668,404	1,865,141	3,099,426	3,014,184
Saudi Arabia	4,426,876	5,343,652	8,537,828	16,328,359	22,548,720	20,472,963
Somalia	80,316	135,572	262,606	376,617	1,720,960	2,438,451
Sudan	253,175	418,954	842,605	1,710,916	2,034,474	2,315,976
Syrian Arab Republic	763,862	837,457	1,582,406	3,666,967	2,097,655	2,090,470
Tunisia	1,068,339	751,145	1,164,657	2,124,636	2,260,176	2,215,759
United Arab Emirates	2,383,112	2,689,831	3,699,873	11,798,947	16,321,705	16,366,137
Yemen	861,080	777,081	1,309,899	2,609,190	3,024,180	4,327,593
Arab Group	25,597,081	27,565,539	39,188,290	83,385,886	112,627,516	117,197,877
Afghanistan	190,811	258,160	743,294	1,219,839	2,141,196	2,909,901
Albania	179,625	233,976	444,577	806,037	597,922	709,538
Azerbaijan	273,550	212,420	448,633	1,219,026	1,824,967	1,854,597
Bangladesh	1,070,507	1,661,707	2,516,238	5,682,224	10,268,487	11,426,661
Brunei Darussalam	210,929	184,839	287,640	334,294	471,198	526,817
Guyana	57,745	80,305	113,218	208,763	253,618	261,399
Indonesia	4,915,882	4,055,430	5,163,343	12,423,027	15,440,774	18,566,748
Iran (Islamic Republic of)	3,591,094	2,893,062	3,207,801	9,088,986	10,151,307	8,331,378
Kazakhstan	494,285	434,927	1,230,618	2,710,915	3,312,401	3,903,827
Kyrgyzstan	105,454	81,307	191,130	547,560	564,271	528,969
Malaysia	3,791,386	3,753,171	5,928,304	13,961,010	16,264,591	17,610,105
Maldives	60,145	76,456	111,935	231,836	396,185	347,877
Pakistan	2,373,361	1,762,287	2,835,930	4,448,163	6,078,254	8,469,697
Suriname	60,533	112,115	134,958	203,608	246,556	235,293
Tajikistan	178,296	124,329	255,730	475,174	647,570	810,084
Türkiye	3,565,216	3,180,448	4,778,007	9,800,717	12,279,194	16,546,427
Turkmenistan	176,729	104,775	110,304	303,413	668,083	404,293
Uzbekistan	746,352	381,892	364,117	858,313	1,504,946	2,289,843
Asian Group	22,041,900	19,591,606	28,865,777	64,522,905	83,111,520	95,733,454
OIC Total	51,546,981	50,825,730	75,512,441	161,259,955	212,218,952	231,844,719
World	452,119,368	425,058,398	668,333,626	1,091,975,407	1,317,150,433	1,538,032,608

Source: FAOSTAT

Annex 13: Agricultural Products Trade Balance, Thousand US Dollars

Area Name	1995	2000	2005	2010	2015	2020
Benin	43,883	2,129	5,230	141,634	-543,108	-119,719
Burkina Faso	-145,236	-60,534	28,388	59,932	229,133	95,612
Cameroon	396,291	123,162	145,550	363,445	342,454	24,629
Chad	115,375	86,297	15,285	-94,427	-87,685	-79,984
Côte d'Ivoire	1,734,945	1,540,058	2,237,496	4,166,907	5,948,307	6,307,516
Gabon	-145,650	-155,441	-220,699	-381,043	-581,428	-444,261
Gambia	-67,569	-58,148	-137,732	-151,237	-129,451	-154,572
Guinea	-173,288	-120,287	-194,818	-330,560	-453,022	-919,251
Guinea-Bissau	-10,087	8,131	29,760	-32,404	94,845	-33,443
Mali	156,683	143,971	68,061	-178,970	-166,203	68,552
Mozambique	-208,412	-163,301	-309,243	-371,219	-206,685	-708,554
Niger	-45,485	-28,129	-190,887	-177,313	-382,059	-731,884
Nigeria	-702,927	-803,994	-1,964,975	-4,463,365	-5,085,233	-4,522,139
Senegal	-333,260	-223,094	-707,202	-831,503	-723,559	-1,150,973
Sierra Leone	-118,834	-109,712	-98,047	-147,968	-339,647	-350,182
Togo	56,948	31,159	4,988	49,815	-15,055	-42,461
Uganda	323,967	127,696	66,695	220,855	602,806	582,278
African Group	877,344	339,963	-1,222,150	-2,157,421	-1,495,590	-2,178,836
Algeria	-3,091,674	-2,523,952	-3,740,348	-5,965,981	-9,665,622	-8,743,317
Bahrain	-217,216	-383,239	-589,053	-915,492	-1,531,342	-1,364,058
Comoros	-22,814	-8,608	-27,371	-56,148	-186,132	-101,179
Djibouti	-92,049	-133,093	-190,639	-393,818	-1,072,561	-985,149
Egypt	-2,803,358	-2,983,596	-2,808,085	-8,741,052	-8,739,826	-8,037,799
Iraq	-1,055,213	-1,913,868	-2,884,791	-6,254,153	-8,042,983	-11,052,306
Jordan	-534,385	-594,626	-820,714	-1,412,358	-2,237,368	-2,819,008
Kuwait	-1,166,458	-1,190,969	-1,462,988	-2,199,099	-4,401,354	-5,048,827
Lebanon	-1,074,589	-944,836	-1,071,513	-2,200,825	-2,539,149	-1,482,867
Libya	-1,183,881	-1,137,004	-1,252,132	-2,214,995	-3,444,680	-3,422,103
Mauritania	-71,006	-154,304	-158,234	-298,750	-802,259	-835,517
Morocco	-1,010,075	-958,243	-957,706	-2,214,328	-1,612,300	-2,313,261
Oman	-589,187	-714,688	-626,460	-1,571,920	-2,119,213	-3,428,472
Palestine	-263,986	-443,254	-478,089	-524,794	-963,917	-872,978
Qatar	-304,730	-369,174	-640,058	-1,848,276	-2,929,116	-2,988,481
Saudi Arabia	-3,980,978	-4,871,885	-7,298,616	-13,379,398	-18,889,931	-16,955,548
Somalia	33,716	-26,029	-151,428	-212,419	-1,187,229	-2,181,513
Sudan	223,819	-45,940	-338,663	-1,249,402	-110,906	-845,653
Syrian Arab Republic	-26,100	-182,144	-735,915	-1,123,309	-1,786,833	-1,431,448
Tunisia	-601,772	-323,269	-211,131	-979,381	-359,800	-874,759
United Arab Emirates	-1,702,806	-1,867,873	-1,328,301	-7,801,035	-9,093,959	-3,237,387
Yemen	-785,196	-709,996	-1,170,019	-2,490,676	-2,838,624	-4,135,187
Arab Group	-20,319,938	-22,480,590	-28,942,254	-64,047,609	-84,555,104	-83,156,817
Afghanistan	-141,215	-215,065	-664,350	-942,725	-1,738,093	-2,210,958
Albania	-165,030	-211,574	-404,435	-749,866	-493,910	-551,796
Azerbaijan	-236,480	-161,989	-119,157	-705,417	-1,333,816	-961,104
Bangladesh	-943,289	-1,562,348	-2,313,749	-5,317,318	-9,665,079	-10,789,106
Brunei Darussalam	-202,076	-184,282	-286,424	-333,483	-467,305	-523,061
Guyana	297,835	64,167	70,138	-85,026	-326,199	-307,096
Indonesia	141,941	99,689	62,879	143,765	124,503	77,444
Iran (Islamic Republic of)	556,437	856,382	5,692,286	18,115,015	17,333,362	18,057,540
Kazakhstan	-2,628,884	-1,916,863	-1,142,107	-3,730,675	-6,450,525	-5,407,870
Kyrgyzstan	154,927	265,772	-435,555	-868,082	-1,173,496	-627,914
Malaysia	29,956	11,478	-62,075	-328,470	-398,105	-261,528
Maldives	4,395,418	1,997,789	4,613,290	9,717,884	6,046,806	5,739,679
Pakistan	-60,145	-76,381	-111,925	-231,833	-396,168	-347,092
Suriname	1,234,902	546,105	1,145,539	421,657	-377,734	-576,863
Tajikistan	-1,364,785	-721,632	-1,208,045	-1,118,711	-1,742,907	-4,485,846
Türkiye	-15,561	-57,139	-106,901	-116,168	-163,600	-124,366
Turkmenistan	24,644	-1,804	-58,826	-250,307	-499,557	-638,187
Uzbekistan	582,257	380,051	2,824,406	1,821,083	3,887,533	3,048,695
Asian Group	1,660,852	-887,644	7,494,989	15,441,323	2,165,710	-889,429
OIC Total	-17,781,742	-23,028,271	-22,669,415	-50,763,707	-83,884,984	-86,225,082
World	-15,100,000	..	-25,500,000	-121,000,000	17,000,000 (2017)	*****

Source: TRADEMAP

Annex 14: The First Export Markets of OIC Countries for Processed Food and Agro-based products and Export Values, Thousand US Dollars

OIC Group	2018		2019		2020		2021	
African group	Country	Value	Country	Value	Country	Value	Country	Value
Benin	Nigeria	36,895	Nigeria	23,636	India	21,360	India	26,825
Burkina Faso	France	11,246	France	14,218	France	17,092	France	13,955
Cameroon	Chad	18,625	..	..	..	..	..	..
Chad	Cameroon	345	Nigeria	135	Saudi Arabia	187	United Arab Emir.	28
Côte d'Ivoire	Burkina Faso	164,854	France	169,886	Burkina Faso	182,528	..	..
Gabon	Cameroon	17,327	Cameroon	20,602	Cameroon	22,962	Cameroon	41,838
Gambia	Mali	463	Guinea-Bissau	1,957	Guinea-Bissau	1,276	Senegal	684
Guinea	..	..	..	..	..	..	..	..
Guinea-Bissau	..	..	..	..	..	..	..	..
Mali	Burkina Faso	8,082	Senegal	12,091	..	..	..	..
Mozambique	USA	27,716	South Africa	23,452	South Africa	17,474	Zimbabwe	64,497
Niger	Benin	25,189	Nigeria	73,839	Nigeria	15,542	Nigeria	14,917
Nigeria	Ghana	63,520	Ghana	51,402	Ghana	25,085	France	68,442
Senegal	Mali	118,619	Mali	111,673	Mali	113,056	Mali	170,007
Sierra Leone	Korea Rep.	26,599	..	..	..	..	..	..
Togo	Niger	31,424	Niger	43,615	Niger	57,440	Niger	56,183
Uganda	Kenya	176,687	South Sudan	172,688	South Sudan	175,854	South Sudan	220,396
Arab Group								
Algeria	..	..	..	..	..	..	..	..
Bahrain	Saudi Arabia	274,574	Saudi Arabia	270,087	Saudi Arabia	244,70	Saudi Arabia	281,855
Comoros	France	14,774	France	12,020	France	3,933	France	4,986
Djibouti	..	..	..	..	..	..	..	..
Egypt	Saudi Arabia	274,466	Saudi Arabia	288,188	Saudi Arabia	261,517	Saudi Arabia	265,437
Iraq	..	..	..	..	..	..	..	..
Jordan	Iraq	108,252	Iraq	107,824	Saudi Arabia	152,272	..	..
Kuwait	Saudi Arabia	174,855	Saudi Arabia	147,556	Saudi Arabia	147,800	Saudi Arabia	143,194
Lebanon	Saudi Arabia	64,08	Saudi Arabia	62,797	Saudi Arabia	60,167	USA	49,107
Libya	Türkiye	337	Türkiye	4,349	..	..	..	..
Mauritania	Spain	279,549	Spain	311,182	Spain	170,182	Spain	256,341
Morocco	Spain	819,319	Spain	717,331	Spain	656,829	Spain	1,043,961
Oman	Iran (Islam. Rep.)	363,733	Iran (Islam. Rep.)	479,314	Saudi Arabia	198,569	Yemen	261,970
Palestine	Israel	106,976	Israel	89,380	Israel	93,882	..	..
Qatar	United Kingdom	2,815	United Kingdom	2,760	United Kingdom	3,461	United Kingdom	3,327
Saudi Arabia	United Arab Emir.	670,547	United Arab Emir.	686,665	United Arab Emir.	614,084	United Arab Emir.	672,817
Somalia	Japan	11,481	Japan	13,304	Japan	11,611	United Arab Emir.	13,194
Sudan	United Arab Emir.	49,126	..	..	..	..	..	..
Syrian Arab Rep.	..	..	..	..	..	..	..	..
Tunisia	Spain	332,75	Italy	185,872	Spain	409,357	Spain	239,150
United Arab Emir.	Iraq	1,707,757	Iraq	1,442,429	Saudi Arabia	1,229,469	Saudi Arabia	1,151,986
Yemen	..	..	..	..	..	..	..	..
Asian Group								
Afghanistan	India	4,441	India	5,549	..	..	..	..
Albania	Italy	25,956	Italy	36,202	Italy	45,550	..	..
Azerbaijan	Russian Fed.	27,234	Russian Fed.	50,501	Russian Federation	32,349	Russian Fed.	30,866
Bangladesh	..	..	..	..	..	..	..	..
Brunei Darussalam	Malaysia	2,048	Malaysia	2,242	Singapore	2,856	Malaysia	9,478
Guyana	United Kingdom	44,324	Venezuela	73,782	Venezuela	88,168	Venezuela	64,527
Indonesia	China	4,324,087	China	4,858,138	China	5,197,115	China	8,749,660
Iran (Islamic Rep.)	Iraq	1,387,080	Iraq	879,754	Iraq	760,696	Iraq	652,930
Kazakhstan	Afghanistan	306,743	Afghanistan	234,921	Afghanistan	346,243	Afghanistan	290,518
Kyrgyzstan	Kazakhstan	48,517	Kazakhstan	39,148	Kazakhstan	48,712	Kazakhstan	59,931
Malaysia	China	1,893,502	China	2,294,864	China	2,841,113	India	4,039,158
Maldives	Germany	16,045	Germany	13,687	Germany	12,514	Germany	14,582
Pakistan	Afghanistan	601,949	Afghanistan	509,419	China	337,766	China	538,589
Suriname	Jamaica	5,544	Brazil	27,243	Brazil	24,674	Brazil	52,434
Tajikistan	United Arab Emir.	1,685	China	1,293	China	3,977	Kazakhstan	2,792
Türkiye	Iraq	2,155,090	Iraq	2,073,560	Iraq	1,984,872	Iraq	2,332,570
Turkmenistan	Afghanistan	7,584	Uzbekistan	2,570	Uzbekistan	1,722	Malaysia	3,162
Uzbekistan	Afghanistan	85,155	Afghanistan	116,349	Afghanistan	244,989	Afghanistan	293,341
OIC Total		96,512,176		93,428,998		99,633,185		1,051,534,512
World Total		888,841,825		875,923,606		888,775,425		130,440,103

Source: TRADEMAP- Table includes the agricultural and food products excl agricultural raw materials

Annex 15: The First Supplying Markets for Processed Food and Agro-based Products Imported by OIC Countries Import Value Thousand US Dollars in the basis of

OIC Group	2018		2019		2020		2021	
African group	Country	Value	Country	Value	Country	Value	Country	Value
Benin	Thailand	436,581	India	301,559	India	225,963	India	403,395
Burkina Faso	Côte d'Ivoire	102,678	Côte d'Ivoire	87,493	Côte d'Ivoire	89,411	Côte d'Ivoire	104,537
Cameroon	Thailand	224,595	..	..	..	..	..	..
Chad	France	2,522	Türkiye	17,079	United Arab Emir.	29,296	United Arab Emir.	26,059
Côte d'Ivoire	China	171,476	Viet Nam	262,884	Viet Nam	271,359	..	..
Gabon	France	74,029	France	62,284	France	64,334	France	73,871
Gambia	Brazil	48,985	Brazil	50,154	Brazil	42,669	Brazil	31,885
Guinea	..	..	..	..	..	..	..	..
Guinea-Bissau	Portugal	15,102	..	..	..	..	..	..
Mali	Côte d'Ivoire	68,501	Brazil	68,284	..	..	..	..
Mozambique	South Africa	202,865	South Africa	214,708	South Africa	235,465	South Africa	304,939
Niger	Thailand	229,878	Thailand	217,648	Thailand	175,245	India	166,419
Nigeria	Brazil	449,504	Brazil	467,293	Brazil	726,051	Brazil	905,577
Senegal	India	275,058	France	128,871	India	154,856	India	349,944
Sierra Leone	China	47,076	..	..	..	..	..	..
Togo	Indonesia	31,891	Malaysia	37,680	Malaysia	44,976	Malaysia	47,923
Uganda	Indonesia	176,877	Indonesia	150,101	Indonesia	173,470	Tanzania	225,025
Arab Group								
Algeria	..	..	..	..	..	..	..	..
Bahrain	Saudi Arabia	250,666	Saudi Arabia	216,616	Saudi Arabia	216,895	Saudi Arabia	237,411
Comoros	Pakistan	24,126	Pakistan	21,476	Pakistan	27,102	Pakistan	28,798
Djibouti	..	..	..	..	..	..	..	..
Egypt	Indonesia	707,582	Indonesia	682,662	Indonesia	685,770	Indonesia	805,086
Iraq	..	..	..	..	..	..	..	..
Jordan	Saudi Arabia	301,847	Saudi Arabia	312,017	Saudi Arabia	350,440	..	..
Kuwait	Saudi Arabia	424,050	India	426,094	Saudi Arabia	443,835	Saudi Arabia	417,385
Lebanon	France	155,964	France	27,439	Türkiye	82,077	Türkiye	147,560
Libya	United Arab Emir.	279,832	United Arab Emir.	357,655	..	..	..	..
Mauritania	Netherlands	24,285	Thailand	31,121	Brazil	77,764	Brazil	79,010
Morocco	USA	374,650	Argentina	338,576	Brazil	480,866	Spain	659,402
Oman	United Arab Emir.	1,431,976	United Arab Emir.	1,334,845	United Arab Emir.	1,138,265	United Arab Emir.	1,260,558
Palestine	Israel	735,901	Israel	786,517	Israel	773,341	..	..
Qatar	India	234,303	India	226,742	India	245,051	India	199,305
Saudi Arabia	India	1,307,095	India	1,358,973	India	1,339,924	India	1,287,765
Somalia	United Arab Emir.	419,423	United Arab Emir.	560,894	United Arab Emir.	706,262	United Arab Emir.	681,423
Sudan	India	353,016	..	..	..	..	..	..
Syrian Arab Rep.	..	..	..	..	..	..	..	..
Tunisia	Brazil	149,017	Serbia	74,826	Brazil	97,323	Switzerland	83,792
United Arab Emir.	India	1,054,429	India	899,822	India	933,64	India	1,144,495
Yemen	..	..	..	..	..	..	..	..
Asian Group								
Afghanistan	Kazakhstan	525,214	Pakistan	384,422	..	..	..	..
Albania	Italy	102,940	Italy	119,536	Italy	126,256	..	..
Azerbaijan	Russian Fed.	266,251	Russian Fed.	315,949	Russian Fed.	351,339	Russian Fed.	391,610
Bangladesh	..	..	..	..	..	..	..	..
Brunei Darussalam	Malaysia	149,844	Malaysia	158,053	Malaysia	216,719	Malaysia	210,975
Guyana	USA	53,932	USA	106,993	USA	47,952	USA	67,505
Indonesia	Thailand	2,098,224	Thailand	1,488,669	Brazil	1,491,718	Argentina	1,548,592
Iran (Islamic Rep.)	India	1,412,785	India	1,806,617	India	978,393	United Arab Emir.	1,285,990
Kazakhstan	Russian Fed.	1,323,609	Russian Fed.	1,569,190	Russian Fed.	1,695,327	Russian Fed.	2,112,423
Kyrgyzstan	Russian Fed.	164,662	Russian Fed.	179,835	Russian Fed.	168,552	Russian Fed.	225,210
Malaysia	Indonesia	1,866,626	Indonesia	1,601,140	Indonesia	1,961,873	Indonesia	3,175,090
Maldives	India	48,523	India	52,198	India	46,110	United Arab Emir.	63,118
Pakistan	Indonesia	1,504,847	Indonesia	1,449,061	Indonesia	1,663,229	Indonesia	3,066,803
Suriname	Netherlands	42,667	Netherlands	47,208	Netherlands	54,799	Netherlands	46,742
Tajikistan	Russian Fed.	158,229	Russian Fed.	210,283	Russian Fed.	246,926	Russian Fed.	266,879
Türkiye	Russian Fed.	616,486	Russian Fed.	735,348	Russian Fed.	1,024,025	Russian Fed.	1,606,705
Turkmenistan	Iran (Islamic Rep.)	61,986	Russian Fed.	56,748	Russian Fed.	106,586	Russian Fed.	102,899
Uzbekistan	Russian Fed.	367,934	Russian Fed.	445,388	Russian Fed.	647,333	Russian Fed.	752,896
OIC Total		123,284,482		123,284,482		125,232,587		144,976,545
World Total		845,119,264		893,734,062		906,825,363		1,059,977,717

Source: TRADEMAP- Table includes the agricultural and food products excl agricultural raw materials

Annex 16: Land Use in the OIC Member Countries (2020)- Area 1000 Ha

Country Name	Land Area	Agricultural Area	Arable Land	Permanent Crops	Permanent Meadows
Benin	11,276.00	3,950.00	2,800.00	600.00	550.00
Burkina Faso	27,360.00	12,143.00	6,000.00	143.00	6,000.00
Cameroon	47,271.00	9,750.00	6,200.00	1,550.00	2,000.00
Chad	125,920.00	50,238.00	5,200.00	38.00	45,000.00
Côte d'Ivoire	31,800.00	21,200.00	3,500.00	4,500.00	13,200.00
Gabon	25,767.00	2,212.64	325.00	170.00	1,717.64
Gambia	1,012.00	605.00	440.00	5.00	160.00
Guinea	24,572.00	14,500.00	3,100.00	700.00	10,700.00
Guinea-Bissau	2,812.00	815.11	300.00	250.00	265.11
Mali	122,019.00	41,201.00	6,411.00	150.00	34,640.00
Mozambique	78,638.00	41,413.83	5,650.00	300.00	35,463.83
Niger	126,670.00	46,597.00	17,700.00	115.00	28,782.00
Nigeria	91,077.00	69,450.05	35,000.00	6,500.00	27,950.05
Senegal	19,253.00	8,878.00	3,200.00	78.00	5,600.00
Sierra Leone	7,218.00	3,949.00	1,584.00	165.00	2,200.00
Togo	5,439.00	3,820.00	2,650.00	170.00	1,000.00
Uganda	20,052.00	14,415.00	6,900.00	2,200.00	5,315.00
African Group	768,156.00	345,137.63	106,960.00	17,634.00	220,543.63
Algeria	238,174.10	41,358.85	7,505.02	1,012.00	32,841.83
Bahrain	785.00	1.08.1960	1.01.1960	3.00	4.00
Comoros	1,861.00	131.00	66.00	50.00	15.00
Djibouti	2,318.00	1,702.00	2.00		1,700.00
Egypt	99,545.00	3,971.00	3,365.00	606.00	
Iraq	43,412.80	9,250.00	5,000.00	250.00	4,000.00
Jordan	8,879.40	1,028.60	206.00	80.60	742.00
Kuwait	1,782.00	150.00	8.00	6.00	136.00
Lebanon	1,023.00	669.67	135.30	134.37	400.00
Libya	175,954.00	15,350.00	1,720.00	330.00	13,300.00
Mauritania	103,070.00	39,661.00	400.00	11.00	39,250.00
Morocco	71,234.00	30,382.00	7,649.00	1,733.00	21,000.00
Oman	30,950.00	1,458.93	74.66	33.27	1,351.00
Palestine	602.00	444.90	69.80	98.10	277.00
Qatar	1,149.00	74.00	21.00	3.00	50.00
Saudi Arabia	214,969.00	173,595.92	3,430.42	165.50	170,000.00
Somalia	62,734.00	44,125.00	1,100.00	25.00	43,000.00
Sudan	186,800.00	69,405.84	20,994.84	216.00	48,195.00
Syrian Arab Republic	18,363.00	13,921.00	4,662.00	1,071.00	8,188.00
Tunisia	15,536.00	9,731.00	2,595.00	2,386.00	4,750.00
United Arab Emirates	7,102.00	389.60	49.00	40.60	300.00
Yemen	52,797.00	23,452.00	1,158.00	294.00	22,000.00
Arab Group	1,339,040.30	480,252.31	60,211.04	8,548.44	411,499.83
Afghanistan	65,223.00	38,356.00	7,829.00	265.00	30,262.00
Albania	2,740.00	1,165.56	599.60	87.96	478.00
Azerbaijan	8,264.60	4,780.00	2,084.30	272.70	2,423.00
Bangladesh	13,017.00	9,901.00	8,000.00	1,301.00	600.00
Brunei Darussalam	527.00	13.40	4.00	6.00	1.03.1940
Guyana	19,685.00	1,241.25	420.00	40.00	781.25
Indonesia	187,751.90	62,300.00	26,300.00	25,000.00	11,000.00
Iran (Islamic Republic of)	162,250.00	47,013.00	15,645.00	1,891.00	29,477.00
Kazakhstan	269,970.00	214,003.20	29,553.20	132.00	184,318.00
Kyrgyzstan	19,180.00	10,367.80	1,287.40	76.70	9,003.70
Malaysia	32,855.00	8,571.00	826.00	7,460.00	285.00
Maldives	30.00	0.10	0.10	0.10	1.00
Pakistan	77,088.00	36,723.00	30,930.00	793.00	5,000.00
Suriname	15,600.00	83.00	62.00	5.00	16.00
Tajikistan	13,879.00	4,916.00	839.40	201.60	3,875.00
Türkiye	76,963.00	37,762.00	19,586.00	3,559.00	14,617.00
Turkmenistan	46,993.00	33,838.00	1,940.00	60.00	31,838.00
Uzbekistan	44,065.00	25,682.50	4,023.00	415.20	21,244.30
Asian Group	1,056,081.50	536,716.81	149,929.00	41,566.26	345,219.25
OIC Total	3,163,277.80	1,362,106.75	317,100.04	67,748.70	977,262.71
World Total	13,030,087.00	4,752,111.00	1,383,346.00	170,236.00	3,196,030.00

Source: FAOSTAT

Annex 17: Cereals Total Production, Tonnes

Country Name	1995	2000	2005	2010	2015	2020
Benin	734,332	993,383	1,151,853	1,333,436	1,643,227	2,203,105
Burkina Faso	2,307,988	2,279,247	3,649,533	4,560,546	4,189,665	5,122,798
Cameroon	1,179,858	1,275,031	1,873,821	3,011,835	3,645,513	3,733,173
Chad	907,316	930,038	1,824,463	3,247,583	2,452,528	2,882,262
Côte d'Ivoire	1,321,407	1,285,904	1,424,903	1,961,771	3,308,600	2,817,182
Gabon	29,452	26,900	35,309	40,754	45,415	46,419
Gambia	98,755	176,100	205,572	363,549	206,609	173,776
Guinea	1,351,036	1,800,810	2,290,039	2,861,146	3,532,856	4,666,854
Guinea-Bissau	200,531	177,884	212,538	256,353	208,495	252,629
Mali	2,188,973	2,310,196	3,398,743	5,338,937	8,055,052	10,352,054
Mozambique	1,126,331	1,587,548	1,142,170	2,802,582	1,503,910	1,948,665
Niger	2,246,328	2,126,435	3,667,114	5,264,113	5,464,509	5,878,468
Nigeria	22,512,600	21,370,000	26,031,000	24,650,298	25,451,761	28,672,504
Senegal	1,186,701	1,025,921	1,432,831	1,767,822	2,152,246	3,640,545
Sierra Leone	407,600	222,472	824,691	1,144,650	987,060	1,170,307
Togo	591,264	740,520	833,289	1,045,866	1,249,728	1,357,456
Uganda	2,030,000	2,112,000	2,526,000	3,270,391	3,720,394	3,436,305
African Group	40,420,472	40,440,389	52,523,869	62,921,632	67,817,568	78,354,502
Algeria	2,139,705	934,656	3,527,824	4,211,355	3,761,230	4,393,322
Bahrain						
Comoros	20,912	18,981	22,250	29,214	36,500	36,806
Djibouti	10	11	9	14	18	17
Egypt	16,097,252	20,105,573	22,423,470	19,464,743	23,141,275	22,320,185
Iraq	2,540,110	904,480	3,708,150	4,362,383	3,471,116	8,885,242
Jordan	98,821	57,133	102,406	87,266	95,323	95,201
Kuwait	1,961	7,996	10,078	20,303	9,312	20,688
Lebanon	100,385	122,800	177,240	111,784	180,116	174,469
Libya	146,511	221,780	233,600	243,539	254,600	209,411
Mauritania	221,643	179,687	170,771	278,473	315,852	486,125
Morocco	1,783,230	1,996,649	4,279,354	7,834,479	11,687,923	3,303,527
Oman	32,949	33,163	32,858	46,034	78,950	182,051
Palestine	65,775	67,842	68,378	26,980	50,142	50,655
Qatar	4,256	7,215	7,094	2,665	1,801	1,803
Saudi Arabia	2,668,863	2,167,394	3,006,637	1,565,155	1,616,813	1,180,993
Somalia	284,920	392,408	355,709	355,815	265,481	177,226
Sudan					4,088,600	3,821,458
Syrian Arab Republic	6,095,329	3,512,791	5,631,256	3,900,866	3,975,474	5,322,612
Tunisia	647,471	1,121,989	2,135,246	1,113,434	1,339,798	1,564,798
United Arab Emirates	4,972	4,037	2,157	5,336	3,695	15,978
Yemen	810,177	672,237	562,230	1,012,945	459,246	447,496
Arab Group	33,765,252	32,528,822	46,456,717	44,672,783	54,833,265	52,690,063
Afghanistan	3,242,179	1,940,000	5,425,000	5,957,000	5,808,288	6,025,977
Albania	645,400	565,800	511,200	693,800	695,000	684,023
Azerbaijan	909,592	1,496,225	2,056,186	1,928,779	2,898,559	3,151,182
Bangladesh	27,704,115	39,503,000	41,146,756	51,862,850	55,438,379	59,960,399
Brunei Darussalam	508	299	851	1,072	1,983	2,511
Guyana	529,300	452,569	424,365	560,532	691,784	691,539
Indonesia	57,990,042	61,575,000	66,674,990	77,610,636	80,643,435	77,149,202
Iran (Islamic Republic of)	17,191,142	12,877,642	21,914,453	19,597,232	18,255,385	22,012,721
Kazakhstan	9,476,320	11,539,396	13,750,260	12,115,916	18,585,932	20,179,388
Kyrgyzstan	911,080	1,550,090	1,621,549	1,510,268	1,753,400	1,901,476
Malaysia	2,170,271	2,205,800	2,389,000	2,512,432	2,803,864	2,389,843
Maldives	11	100	120	164	197	200
Pakistan	25,036,450	30,460,700	33,507,800	34,811,258	41,081,682	42,540,915
Suriname	216,323	163,695	163,990	226,721	268,529	285,858
Tajikistan	242,350	544,994	902,912	1,382,559	1,324,045	1,280,841
Türkiye	28,168,560	32,240,094	36,464,200	32,764,875	38,632,438	37,184,688
Turkmenistan	1,102,050	1,751,000	3,035,000	1,535,230	1,617,000	1,533,057
Uzbekistan	3,382,600	4,107,900	6,534,570	7,473,500	8,014,002	7,121,545
Asian Group	178,918,293	202,974,304	236,523,202	252,544,824	278,513,902	284,095,365
OIC Total	253,104,017	275,943,515	335,503,788	360,139,239	401,164,735	415,139,930
World Total	1,899,401,998	2,058,541,725	2,266,634,527	2,461,509,552	2,833,660,085	2,996,142,289

Source: FAOSTAT

Annex 18: Oilcrops Primary Production, Tonnes

Country Name	1995	2000	2005	2010	2015	2020
Benin	657,210	730,989	676,512	856,101	1,185,346	1,783,409
Burkina Faso	417,767	459,218	1,039,931	1,047,829	1,444,917	1,510,925
Cameroon	1,379,725	1,573,936	2,187,327	3,018,111	3,237,778	3,557,949
Chad	474,581	588,242	748,711	1,313,927	1,069,055	1,211,238
Côte d'Ivoire	2,024,516	1,876,090	1,867,775	2,021,070	2,614,378	3,211,729
Gabon	54,918	53,800	51,398	43,387	54,882	60,078
Gambia	112,534	176,338	144,657	175,566	140,351	146,566
Guinea	972,582	1,118,466	1,173,957	1,242,610	1,433,903	2,020,550
Guinea-Bissau	132,400	150,152	154,954	163,827	171,024	169,792
Mali	714,273	588,699	955,636	715,760	1,151,962	669,869
Mozambique	655,995	673,590	745,413	677,206	575,479	769,334
Niger	127,526	138,494	199,729	528,761	504,620	737,862
Nigeria	10,797,820	12,895,596	14,234,729	14,013,749	14,177,959	16,449,197
Senegal	897,151	1,154,089	856,754	1,444,241	1,226,216	1,984,069
Sierra Leone	267,295	194,304	320,130	300,068	332,694	338,900
Togo	297,292	361,199	417,780	502,386	602,510	760,270
Uganda	401,300	547,947	814,773	822,038	824,072	1,007,377
African Group	20,384,885	23,281,149	26,590,166	28,886,637	30,747,146	36,389,114
Algeria	165,751	250,126	348,889	340,085	681,119	1,114,822
Bahrain	0	0	0	0	0	0
Comoros	71,405	74,910	81,542	92,994	73,757	85,881
Djibouti	0	0	0	0	0	0
Egypt	1,162,149	1,145,126	1,220,240	1,104,679	1,180,260	1,479,704
Iraq	111,039	75,890	114,231	91,427	23,130	50,859
Jordan	63,274	134,503	113,167	171,790	200,937	173,102
Kuwait	1	1	15	29	57	737
Lebanon	63,615	197,320	82,260	208,141	140,925	145,919
Libya	183,000	185,000	207,118	199,144	179,522	189,224
Mauritania	5,367	5,186	3,512	3,570	3,543	3,350
Morocco	463,629	462,080	819,237	1,619,112	1,235,167	1,473,550
Oman	0	0	0	0	0	0
Palestine	44,889	157,485	88,366	112,863	88,845	91,130
Qatar	0	0	0	0	0	0
Saudi Arabia	6,050	7,393	8,964	6,664	5,738	370,537
Somalia	42,761	41,316	54,896	51,320	60,252	60,600
Sudan	0	0	0	0	1,649,700	4,808,195
Syrian Arab Republic	1,081,615	1,992,439	1,686,181	1,467,833	1,018,197	919,078
Tunisia	319,007	571,841	1,069,265	890,745	1,714,416	2,014,572
United Arab Emirates	0	0	0	0	0	0
Yemen	26,398	45,987	39,936	52,472	38,156	33,955
Arab Group	3,809,950	5,346,603	5,937,819	6,412,868	8,293,721	13,015,215
Afghanistan	118,605	106,066	97,712	73,745	92,879	159,145
Albania	40,860	40,640	33,930	73,841	99,320	134,492
Azerbaijan	275,129	106,319	228,746	73,009	76,211	382,694
Bangladesh	520,365	436,340	758,120	829,769	991,655	1,064,853
Brunei Darussalam	142	169	358	358	416	401
Guyana	75,600	81,900	71,861	78,256	91,196	149,302
Indonesia	39,714,944	54,217,124	94,721,539	165,476,047	203,080,087	275,450,672
Iran (Islamic Republic of)	773,278	783,241	990,647	672,682	717,055	870,297
Kazakhstan	385,045	456,630	942,630	1,017,560	1,821,383	2,886,312
Kyrgyzstan	93,976	141,238	205,711	134,860	93,246	96,821
Malaysia	43,337,258	57,466,669	75,522,700	83,811,653	99,041,766	97,722,989
Maldives	11,880	15,670	17,035	4,260	508	299
Pakistan	5,906,621	6,174,848	7,298,898	6,676,790	5,919,029	5,005,858
Suriname	15,946	9,896	6,415	10,012	13,923	14,791
Tajikistan	411,855	336,478	456,577	323,845	293,555	433,036
Türkiye	1,293,000	1,030,000	1,000,000	1,286,300	763,650	636,360
Turkmenistan	3,842,640	5,019,382	4,575,158	5,261,680	5,978,498	5,710,494
Uzbekistan	3,960,539	3,027,908	3,763,938	3,508,220	3,459,139	3,167,809
Asian Group	100,777,683	129,450,518	190,691,975	269,312,887	322,533,516	393,886,625
OIC Total	124,972,518	158,078,270	223,219,960	304,612,392	361,574,383	443,290,954
World Total	434,162,947	515,237,768	673,906,588	835,193,318	980,451,134	1,135,622,144

Source: FAOSTAT

Annex 19: Fruit Primary, Total Production, Tonnes

Country Name	1995	2000	2005	2010	2015	2020
Benin	180,622	194,030	266,373	433,526	434,252	627,319
Burkina Faso	75,091	78,429	83,084	94,191	106,100	104,416
Cameroon	2,457,273	2,056,413	3,285,742	4,950,551	6,400,201	6,410,141
Chad	109,191	113,206	112,658	117,267	123,110	125,896
Côte d'Ivoire	2,047,054	2,347,112	2,282,068	2,170,545	2,465,668	2,891,070
Gabon	258,464	294,357	294,178	337,491	372,490	387,085
Gambia	4,474	5,866	6,998	8,429	9,679	9,503
Guinea	979,346	1,009,558	1,121,152	1,204,624	1,289,288	1,317,847
Guinea-Bissau	69,033	75,343	83,455	95,944	109,065	109,077
Mali	448,484	534,481	621,510	1,688,918	1,295,168	2,350,297
Mozambique	336,700	290,768	398,986	646,767	1,019,695	1,138,328
Niger	48,147	138,204	281,800	512,205	554,222	636,912
Nigeria	7,928,578	9,389,796	9,671,111	10,762,880	11,506,523	11,529,922
Senegal	365,350	241,863	387,487	436,900	552,375	2,008,315
Sierra Leone	156,465	170,536	209,725	237,309	266,544	269,722
Togo	44,571	48,445	52,700	59,900	66,541	66,823
Uganda	9,060,400	9,480,650	9,099,228	4,749,200	4,679,168	7,457,778
African Group	24,569,243	26,469,057	28,258,255	28,506,647	31,250,089	37,440,451
Algeria	1,547,190	1,802,532	3,092,650	4,447,608	6,235,744	7,055,092
Bahrain	21,608	22,098	18,336	20,154	22,987	21,284
Comoros	59,019	62,615	68,700	61,690	49,815	50,526
Djibouti	3,207	3,612	3,714	4,152	4,553	4,873
Egypt	7,454,444	9,551,830	11,021,298	12,313,121	15,395,048	14,733,617
Iraq	2,507,211	2,587,286	1,702,996	1,543,569	1,109,403	2,160,646
Jordan	347,007	307,769	412,745	475,795	589,532	558,727
Kuwait	7,355	13,205	25,074	37,734	104,812	124,522
Lebanon	1,434,760	924,200	1,004,810	852,574	1,053,911	1,036,334
Libya	574,029	555,929	598,403	648,862	668,487	685,416
Mauritania	35,414	27,000	25,426	25,773	27,970	29,055
Morocco	2,337,929	3,318,374	3,852,567	4,297,236	5,642,885	5,586,937
Oman	262,530	359,353	324,012	382,421	416,832	505,249
Palestine	293,123	251,151	194,167	94,317	102,937	109,350
Qatar	18,529	23,143	22,841	24,634	28,890	29,144
Saudi Arabia	1,636,138	1,569,073	2,161,661	2,155,020	2,051,296	2,913,925
Somalia	223,383	208,821	213,484	207,780	209,967	214,348
Sudan					3,618,376	3,263,482
Syrian Arab Republic	1,762,444	2,134,338	2,455,080	2,753,720	2,429,353	2,449,998
Tunisia	1,049,564	1,379,832	1,590,270	1,704,534	2,168,329	2,389,063
United Arab Emirates	296,452	975,152	792,199	858,950	435,844	361,471
Yemen	527,603	775,267	938,314	1,253,538	1,112,288	1,173,553
Arab Group	22,398,939	26,852,580	30,518,747	34,163,182	43,479,259	45,456,612
Afghanistan	789,515	856,631	936,922	1,360,110	1,831,103	3,459,051
Albania	288,825	391,651	455,290	634,378	765,329	818,946
Azerbaijan	725,912	788,471	1,092,698	1,250,376	1,479,608	1,685,881
Bangladesh	1,487,405	1,440,000	3,099,030	3,917,826	4,516,921	5,027,255
Brunei Darussalam	4,956	5,214	6,155	6,587	7,354	8,133
Guyana	66,544	75,359	53,584	56,826	195,960	327,946
Indonesia	10,866,450	8,710,401	15,261,368	15,634,651	20,732,093	22,743,965
Iran (Islamic Republic of)	11,701,699	13,813,313	19,320,716	17,829,472	19,031,448	18,963,596
Kazakhstan	328,395	685,090	986,130	1,352,656	2,369,052	2,863,721
Kyrgyzstan	110,300	253,472	243,954	354,893	463,484	457,024
Malaysia	1,303,694	1,333,937	1,322,137	1,202,850	1,328,908	1,113,002
Maldives	11,730	9,560	10,497	6,790	4,326	6,144
Pakistan	5,957,952	5,902,443	6,941,856	9,668,754	9,795,029	9,825,573
Suriname	93,086	76,219	89,202	131,553	116,835	97,803
Tajikistan	361,100	375,462	413,330	835,343	1,136,857	1,342,138
Türkiye	14,975,475	16,629,300	18,450,775	19,229,237	20,296,003	24,153,128
Turkmenistan	394,000	482,000	661,000	662,759	654,741	683,563
Uzbekistan	1,715,887	1,866,500	2,207,180	3,880,000	6,180,943	5,824,616
Asian Group	51,182,925	53,695,023	71,551,824	78,015,061	90,905,994	99,401,485
OIC Total	98,151,107	107,016,660	130,328,826	140,684,890	165,635,342	182,298,548
World Total	466,876,272	571,913,099	652,244,756	735,617,934	835,388,478	887,027,376

Source: FAOSTAT

Annex 20: Vegetables Primary, Total Production, Tonnes

Country Name	1995	2000	2005	2010	2015	2020
Benin	266,366	278,679	329,507	302,253	630,671	702,795
Burkina Faso	241,289	239,035	242,982	270,529	308,499	302,869
Cameroon	687,552	1,212,461	1,465,602	2,039,598	2,726,840	3,051,807
Chad	100,852	96,448	98,334	102,303	108,054	110,564
Côte d'Ivoire	603,258	582,913	664,897	642,608	703,186	770,581
Gabon	32,966	35,389	37,432	42,855	49,748	50,018
Gambia	8,000	9,000	10,405	11,359	12,786	12,828
Guinea	502,311	499,745	561,343	563,516	552,794	561,210
Guinea-Bissau	23,500	25,129	26,387	32,155	39,188	39,426
Mali	869,853	884,555	1,002,632	1,209,889	1,570,431	2,535,287
Mozambique	147,630	115,282	250,868	449,650	699,010	981,152
Niger	346,845	529,608	842,654	869,446	2,275,658	3,333,839
Nigeria	5,898,594	8,277,564	11,115,881	12,090,852	16,187,140	15,706,483
Senegal	77,620	259,124	290,591	509,147	741,852	1,000,629
Sierra Leone	187,000	182,000	264,000	306,136	353,974	468,497
Togo	144,793	136,894	141,273	143,688	146,455	149,504
Uganda	475,940	546,286	760,777	1,087,032	1,412,799	1,380,470
African Group	10,614,369	13,910,112	18,105,565	20,673,016	28,519,085	31,157,959
Algeria	2,246,286	1,783,773	3,011,333	4,116,878	5,985,283	7,986,465
Bahrain	12,164	10,542	7,950	15,324	15,597	18,179
Comoros	5,919	6,420	4,277	5,019	5,336	5,295
Djibouti	21,893	24,651	26,940	31,337	36,044	35,486
Egypt	8,797,644	12,568,379	14,406,872	16,773,785	16,396,416	16,135,024
Iraq	2,372,200	2,677,500	3,197,596	3,059,473	1,106,412	1,733,642
Jordan	803,660	799,222	1,251,424	1,412,842	1,690,762	1,401,350
Kuwait	111,945	186,116	261,355	334,009	296,352	376,740
Lebanon	981,410	813,400	726,200	879,599	754,543	680,318
Libya	531,388	652,790	605,487	652,469	677,741	688,745
Mauritania	3,524	3,815	4,000	4,410	4,649	4,794
Morocco	1,907,076	2,537,034	3,598,847	4,379,584	4,213,408	3,983,906
Oman	164,400	176,833	177,428	302,928	385,066	836,190
Palestine	505,086	553,392	594,746	435,421	290,637	465,434
Qatar	42,389	50,980	18,391	41,347	34,955	71,035
Saudi Arabia	1,734,080	1,166,071	1,392,971	1,271,985	648,299	1,052,171
Somalia	49,932	61,862	81,159	96,252	103,858	104,260
Sudan					3,276,697	3,868,342
Syrian Arab Republic	1,594,250	1,529,933	2,120,399	2,368,171	1,775,644	2,088,946
Tunisia	1,258,131	1,709,785	1,825,263	2,541,536	3,140,932	3,138,362
United Arab Emirates	696,766	2,124,839	431,560	188,242	184,898	233,009
Yemen	375,945	476,797	496,939	646,029	482,325	480,563
Arab Group	24,216,088	29,914,134	34,241,137	39,556,640	41,505,854	45,388,256
Afghanistan	1,171,983	1,108,694	1,243,836	969,763	1,008,465	1,822,632
Albania	399,500	376,537	451,000	604,559	748,746	988,507
Azerbaijan	77,214	765,901	1,165,164	1,223,024	1,276,769	1,740,427
Bangladesh	1,390,105	1,723,000	2,471,290	3,472,597	5,058,058	7,138,722
Brunei Darussalam	9,329	13,807	12,422	10,455	10,640	9,858
Guyana	24,545	74,720	31,946	73,224	179,085	194,361
Indonesia	6,562,565	6,579,705	7,838,948	9,398,266	10,237,085	12,581,898
Iran (Islamic Republic of)	5,868,943	8,463,955	11,241,607	14,006,099	13,669,831	12,623,192
Kazakhstan	779,750	1,487,510	2,207,723	2,577,467	3,565,397	4,450,783
Kyrgyzstan	318,713	747,042	736,873	812,302	1,052,290	1,101,996
Malaysia	403,488	398,846	521,872	847,992	1,359,632	1,171,544
Maldives	3,103	2,989	2,460	2,510	2,675	2,611
Pakistan	3,565,876	4,427,637	4,715,230	4,608,150	4,784,710	5,572,793
Suriname	23,782	19,159	18,935	13,179	24,142	22,204
Tajikistan	495,876	368,335	755,761	1,180,989	1,778,034	2,374,585
Türkiye	16,471,951	18,841,662	20,628,962	20,655,850	23,696,207	25,960,714
Turkmenistan	376,000	347,200	549,500	664,781	659,198	678,063
Uzbekistan	2,725,000	2,645,100	3,517,760	6,347,100	10,129,923	9,903,740
Asian Group	40,667,723	48,391,799	58,111,289	67,468,307	79,240,887	88,338,630
OIC Total	75,498,180	92,216,045	110,457,991	127,697,963	149,265,826	164,884,845
World Total	512,780,209	686,643,002	789,725,045	938,781,301	1,084,174,676	1,148,446,252

Source: FAOSTAT

Annex 21: Beef and Buffalo Meat Production, Tonnes

Country Name	1995	2000	2005	2010	2015	2020
Benin	15,400	25,653	29,971	34,085	38,760	44,064
Burkina Faso	62,146	68,615	111,745	123,374	94,973	108,296
Cameroon	73,000	93,000	94,000	81,910	96,526	80,779
Chad	136,560	176,760	228,960	296,520	384,022	472,864
Côte d'Ivoire	36,990	33,232	29,612	34,264	31,384	34,109
Gabon	1,016	1,115	1,571	1,135	1,191	984
Gambia	3,342	3,469	3,936	4,080	4,701	4,249
Guinea	28,590	34,395	41,022	61,600	80,000	105,217
Guinea-Bissau	3,982	4,510	5,247	6,353	6,961	7,290
Mali	54,080	56,312	107,679	143,676	160,000	71,252
Mozambique	13,500	12,000	6,148	8,103	12,303	16,184
Niger	62,000	47,549	58,522	60,357	58,942	68,758
Nigeria	266,861	279,000	305,610	306,960	384,396	326,398
Senegal	43,750	46,157	47,196	61,079	83,794	77,007
Sierra Leone	7,004	6,489	7,210	10,094	13,200	9,397
Togo	5,578	6,620	8,200	9,250	10,234	6,447
Uganda	86,400	96,750	147,000	180,300	214,210	163,889
African Group	900,199	991,626	1,233,629	1,423,140	1,675,597	1,597,184
Algeria	100,600	132,600	120,000	126,126	155,037	144,434
Bahrain	684	896	875	1,020	986	853
Comoros	1,005	1,012	1,100	1,243	1,271	1,216
Djibouti	3,278	6,050	5,170	6,050	6,193	6,074
Egypt	533,000	570,000	707,000	855,653	837,384	571,107
Iraq	43,337	47,775	48,080	55,786	56,824	39,186
Jordan	3,900	6,500	7,530	12,299	27,452	30,733
Kuwait	602	806	728	2,004	1,882	1,900
Lebanon	17,685	57,600	61,467	45,764	46,163	44,265
Libya	21,600	8,200	7,600	13,400	9,180	7,010
Mauritania	9,600	21,000	25,200	25,787	30,320	29,716
Morocco	122,100	140,000	157,000	192,000	245,514	282,000
Oman	3,454	3,936	4,810	14,950	13,888	15,333
Palestine	10,670	13,921	5,228	5,810	8,290	10,739
Qatar	246	540	300	576	647	1,512
Saudi Arabia	26,000	21,600	22,400	44,000	40,800	42,000
Somalia	49,500	61,600	67,650	59,180	60,387	55,000
Sudan	224,750	296,000	350,000	343,000	366,752	389,367
Syrian Arab Republic	33,910	47,255	55,411	62,215	65,591	6,145
Tunisia	43,700	52,000	45,800	55,800	58,300	41,600
United Arab Emirates	10,875	15,325	7,050	15,000	16,163	18,086
Yemen	40,634	51,698	72,627	107,512	114,743	90,164
Arab Group	1,301,130	1,556,314	1,773,026	2,045,175	2,163,767	1,828,440
Afghanistan	130,000	126,000	141,100	131,000	136,428	116,008
Albania	30,800	35,900	40,800	40,800	38,556	32,870
Azerbaijan	54,951	78,425	95,909	112,361	129,753	143,082
Bangladesh	151,216	176,500	188,000	194,112	202,102	200,442
Brunei Darussalam	1,251	3,358	2,213	824	606	2,393
Guyana	3,800	1,900	2,028	2,260	2,282	2,927
Indonesia	359,462	385,795	396,757	472,364	542,071	540,503
Iran (Islamic Republic of)	264,920	289,000	363,000	362,351	331,440	534,494
Kazakhstan	548,200	306,300	348,300	406,817	416,823	521,847
Kyrgyzstan	84,700	100,622	90,850	97,712	99,059	113,611
Malaysia	16,919	17,501	29,396	46,510	50,494	43,493
Maldives	..	..	..	..	..	..
Pakistan	847,000	886,000	1,004,000	1,485,000	1,750,000	2,297,000
Suriname	1,800	1,952	1,338	1,882	1,474	1,724
Tajikistan	32,000	14,800	26,700	28,642	37,794	166,323
Türkiye	298,545	358,683	323,258	621,971	1,015,251	785,822
Turkmenistan	51,000	72,000	103,000	140,004	143,305	144,416
Uzbekistan	392,000	390,000	518,100	665,300	850,000	961,772
Asian Group	3,268,564	3,244,736	3,674,749	4,809,910	5,747,438	6,608,727
OIC Total	5,469,893	5,792,676	6,681,404	8,278,225	9,586,802	10,034,351
World Total	55,374,837	58,850,260	62,420,785	66,553,535	67,979,125	72,070,309

Source: FAOSTAT

Annex 22: Meat, Poultry Production, Tonnes

Country Name	1995	2000	2005	2010	2015	2020
Benin	10,800	13,853	13,255	10,335	13,245	15,508
Burkina Faso	22,470	26,469	30,882	37,280	38,179	45,297
Cameroon	21,200	21,200	53,200	68,000	76,224	85,298
Chad	4,828	5,307	5,586	5,985	6,121	6,617
Côte d'Ivoire	24,180	22,088	22,521	34,899	42,837	72,832
Gabon	3,200	3,760	3,760	3,760	3,963	3,990
Gambia	1,100	960	975	1,200	1,575	1,619
Guinea	2,955	4,176	5,570	7,771	11,103	12,384
Guinea-Bissau	798	1,357	1,684	2,035	2,599	3,155
Mali	25,600	29,200	34,400	41,600	43,776	57,844
Mozambique	30,474	32,850	20,753	41,994	77,574	118,579
Niger	10,120	10,976	11,708	16,400	17,594	20,103
Nigeria	169,000	160,000	218,750	245,000	197,580	238,250
Senegal	17,460	23,239	29,042	45,451	60,118	122,823
Sierra Leone	8,673	5,484	4,873	14,014	16,621	21,218
Togo	7,360	12,000	17,600	28,400	34,205	43,447
Uganda	36,400	44,090	52,650	62,300	62,516	69,991
African Group	396,618	417,009	527,209	666,424	705,830	938,955
Algeria	208,365	244,020	270,360	274,820	291,480	284,020
Bahrain	5,031	5,777	5,050	6,260	6,661	9,125
Comoros	464	512	560	568	577	585
Djibouti	..	..	..	..	..	0
Egypt	389,773	591,762	664,636	851,133	1,166,521	1,468,854
Iraq	37,000	74,000	85,000	52,812	86,000	156,549
Jordan	107,740	119,043	133,165	187,724	181,997	200,561
Kuwait	25,899	32,964	37,821	37,831	53,293	62,553
Lebanon	58,000	105,000	122,400	80,000	100,751	126,010
Libya	102,800	98,540	98,800	118,800	120,706	129,748
Mauritania	3,840	4,080	4,440	4,464	3,826	4,624
Morocco	197,000	267,000	388,000	612,500	714,954	881,764
Oman	3,880	4,320	5,840	5,944	6,270	6,547
Palestine	48,560	73,873	69,090	43,580	54,319	42,728
Qatar	3,817	4,209	5,308	8,120	8,527	34,790
Saudi Arabia	310,000	483,700	537,700	575,684	518,348	900,650
Somalia	3,120	3,200	3,680	3,520	3,831	3,886
Sudan	25,000	26,000	30,500	38,000	60,000	80,357
Syrian Arab Republic	88,864	110,190	165,275	192,000	101,145	126,625
Tunisia	70,460	116,870	132,000	160,700	219,600	229,729
United Arab Emirates	22,470	27,312	33,600	40,800	46,390	51,156
Yemen	47,156	66,734	113,195	144,103	176,763	194,546
Arab Group	1,759,239	2,459,106	2,906,420	3,439,363	3,921,959	4,995,407
Afghanistan	12,320	13,200	32,320	28,000	23,968	27,938
Albania	3,900	4,000	9,000	17,000	12,905	13,788
Azerbaijan	14,300	17,188	34,664	64,470	97,211	115,388
Bangladesh	117,481	129,900	168,000	203,200	235,500	269,295
Brunei Darussalam	4,241	11,904	15,635	20,910	23,552	26,566
Guyana	7,318	11,800	22,699	24,900	30,678	47,112
Indonesia	875,700	817,740	1,147,060	1,565,600	2,065,738	3,752,238
Iran (Islamic Republic of)	649,850	814,700	1,248,700	1,677,825	2,038,159	2,230,892
Kazakhstan	53,000	33,300	45,700	102,979	136,924	228,630
Kyrgyzstan	2,662	4,643	5,381	4,064	7,997	9,679
Malaysia	706,737	714,270	964,000	1,263,563	1,633,408	1,597,527
Maldives	..	..	..	..	..	0
Pakistan	312,550	331,680	388,680	711,940	1,078,941	1,662,156
Suriname	4,120	4,250	8,143	11,984	9,476	10,370
Tajikistan	600	100	200	1,054	1,600	3,745
Türkiye	298,203	668,333	983,462	1,478,803	1,964,640	2,201,120
Turkmenistan	4,000	6,000	14,000	19,500	20,390	20,110
Uzbekistan	16,000	16,000	21,300	27,000	52,000	66,369
Asian Group	3,082,982	3,599,008	5,108,944	7,222,792	9,433,087	12,282,923
OIC Total	5,238,839	6,475,123	8,542,573	11,328,579	14,060,876	18,217,285
World Total	55,295,722	68,638,943	81,323,150	99,296,537	116,259,109	155,416,121

Source: FAOSTAT

Annex 23: Sheep and Goat Meat Production, Tonnes

Country Name	1995	2000	2005	2010	2015	2020
Benin	5,765	6,432	7,165	8,177	9,042	9,650
Burkina Faso	33,568	38,913	44,577	51,676	51,597	60,538
Cameroon	27,718	31,900	32,080	36,609	28,276	34,174
Chad	58,692	82,470	116,058	163,614	231,026	323,226
Côte d'Ivoire	10,785	10,391	11,703	12,020	11,560	17,248
Gabon	900	960	1,219	1,004	1,141	1,164
Gambia	839	688	1,405	1,540	1,322	1,239
Guinea	5,772	7,878	10,963	15,412	20,522	27,656
Guinea-Bissau	1,430	1,598	1,716	2,348	2,472	2,530
Mali	45,023	65,675	83,215	118,435	134,953	20,918
Mozambique	18,144	25,380	25,188	20,160	24,876	2,219
Niger	52,884	31,330	33,481	37,049	45,143	52,666
Nigeria	222,227	336,624	394,048	458,155	393,663	411,747
Senegal	23,159	23,632	28,239	33,379	40,244	50,870
Sierra Leone	1,330	1,138	1,446	3,505	3,937	3,682
Togo	3,268	7,104	9,540	10,781	10,503	14,020
Uganda	25,772	29,920	36,840	42,691	44,651	45,270
African Group	537,276	702,033	838,883	1,016,555	1,054,928	1,078,817
Algeria	178,450	176,350	191,283	221,418	330,401	354,671
Bahrain	8,995	7,101	10,920	16,740	16,870	30,508
Comoros	434	433	453	474	481	475
Djibouti	4,405	4,534	4,547	4,534	4,626	4,535
Egypt	116,000	124,000	138,000	128,122	125,249	61,192
Iraq	30,554	31,080	30,956	53,600	56,066	57,102
Jordan	12,000	13,468	15,317	17,168	21,547	22,156
Kuwait	38,171	34,355	44,770	37,106	46,556	53,211
Lebanon	10,518	8,546	10,972	13,550	10,869	7,536
Libya	36,376	30,150	36,600	44,925	45,062	43,616
Mauritania	21,165	34,200	39,300	43,800	54,688	56,589
Morocco	132,000	147,000	137,000	162,000	185,430	210,000
Oman	16,625	17,650	27,550	34,740	40,739	49,649
Palestine	15,320	15,679	27,397	14,795	15,281	15,629
Qatar	10,118	6,494	8,856	10,720	11,419	5,193
Saudi Arabia	87,536	98,200	105,500	98,300	117,097	146,212
Somalia	57,200	67,600	92,300	81,900	84,204	87,033
Sudan	236,913	383,000	470,000	476,000	369,000	387,012
Syrian Arab Republic	136,570	188,770	186,969	166,125	175,100	160,408
Tunisia	54,000	63,200	64,000	59,400	59,400	64,800
United Arab Emirates	50,700	38,420	25,900	45,100	58,229	65,123
Yemen	37,990	46,840	46,345	69,330	127,624	129,940
Arab Group	1,292,040	1,537,070	1,714,935	1,799,847	1,955,938	2,012,590
Afghanistan	133,600	169,700	133,500	157,200	153,770	157,160
Albania	18,300	19,500	20,900	21,000	26,251	23,669
Azerbaijan	23,000	34,984	41,894	74,280	70,940	87,058
Bangladesh	107,000	131,600	158,400	194,996	212,450	236,530
Brunei Darussalam	50	39	66	69	65	61
Guyana	780	780	780	820	834	836
Indonesia	94,283	78,300	97,931	113,658	109,473	136,747
Iran (Islamic Republic of)	376,800	435,666	432,000	371,515	429,213	335,951
Kazakhstan	205,800	95,100	106,600	142,944	165,102	172,468
Kyrgyzstan	54,100	43,105	46,374	50,432	70,965	75,591
Malaysia	671	888	1,460	2,387	4,407	4,026
Maldives	..	..	..	..	..	0
Pakistan	683,000	467,000	532,000	434,000	483,000	748,000
Suriname	52	43	35	33	18	18
Tajikistan	11,300	12,900	26,900	39,240	54,100	59,692
Türkiye	372,000	374,000	315,000	273,900	404,077	110,083
Turkmenistan	49,500	70,500	96,500	120,008	144,219	136,489
Uzbekistan	83,000	79,400	73,600	100,000	191,200	170,196
Asian Group	2,213,236	2,013,505	2,083,940	2,096,482	2,520,084	2,454,575
OIC Total	4,042,552	4,252,608	4,637,758	4,912,884	5,530,950	5,545,982
World Total	10,563,474	11,620,199	12,828,021	13,690,948	15,106,114	21,082,345

Source: FAOSTAT

Annex 24 Total Fisheries Production, Metric Tons

Country Name	1995	2000	2005	2010	2015	2020
Benin	44,379	32,324	31,847	40,155	37,747	76,952
Burkina Faso	8,000	8,505	9,065	14,800	21,030	29,755
Cameroon	94,188	112,159	142,747	181,570	225,955	285,186
Chad	90,000	83,200	77,000	91,030	100,154	107,105
Côte d'Ivoire	70,575	81,520	43,531	56,937	68,000	108,031
Gabon	40,476	48,384	43,941	32,822	33,045	29,060
Gambia	23,699	29,021	34,960	46,649	56,003	51,023
Guinea	67,864	91,513	109,238	113,689	126,250	310,705
Guinea-Bissau	6,328	6,315	6,983	6,584	6,700	62,392
Mali	133,000	109,900	101,008	102,083	94,880	125,376
Mozambique	27,411	41,530	85,778	163,419	287,720	405,066
Niger	3,651	16,265	50,058	40,070	27,300	46,649
Nigeria	366,101	467,095	579,537	817,516	1,027,058	1,044,812
Senegal	366,372	436,109	399,902	409,795	426,650	452,848
Sierra Leone	64,895	74,760	143,023	200,075	202,175	200,715
Togo	12,221	22,297	27,756	27,635	21,555	18,764
Uganda	208,983	220,176	427,575	508,805	513,795	690,158
African Group	1,628,143	1,881,073	2,313,949	2,853,634	3,276,017	4,044,597
Algeria	106,248	113,511	126,628	95,223	97,279	86,901
Bahrain	9,393	11,730	11,858	13,493	15,006	14,420
Comoros	13,109	12,003	10,738	63,447	12,674	20,755
Djibouti	350	800	1,571	1,590	2,012	2,323
Egypt	407,117	724,408	889,302	1,304,795	1,518,944	2,010,579
Iraq	30,808	22,512	43,949	39,668	52,099	57,474
Jordan	595	1,119	1,071	1,027	1,758	2,639
Kuwait	8,706	7,354	5,222	6,683	4,549	3,545
Lebanon	4,385	4,066	4,611	4,580	4,663	3,728
Libya	34,448	50,009	37,783	50,116	26,012	31,637
Mauritania	56,147	114,456	304,877	276,238	403,776	678,425
Morocco	858,884	916,713	1,041,467	1,144,394	1,371,281	1,399,151
Oman	139,861	120,421	157,544	164,054	257,192	794,726
Palestine	1,229	2,623	1,824	1,979	3,503	0
Qatar	4,271	7,140	13,946	13,796	15,213	15,109
Saudi Arabia	48,388	55,084	74,796	91,519	98,130	161,849
Somalia	32,400	24,150	25,000	30,000	30,000	30,000
Sudan	45,003	54,010	60,608	73,358	74,528	47,510
Syrian Arab Republic	11,639	13,369	16,980	15,247	6,600	6,145
Tunisia	84,216	96,224	111,756	98,603	133,442	126,739
United Arab Emirates	105,884	105,456	87,325	79,808	73,790	69,529
Yemen	107,970	114,750	238,780	164,011	180,813	131,307
Arab Group	2,111,051	2,571,908	3,267,636	3,733,629	4,383,264	5,694,491
Afghanistan	1,600	1,300	1,450	2,050	2,150	10,050
Albania	1,720	3,635	6,473	7,636	9,473	16,911
Azerbaijan	11,061	18,937	9,501	2,081	1,129	2,622
Bangladesh	1,109,462	1,661,384	2,215,957	3,035,101	3,684,245	4,503,371
Brunei Darussalam	4,822	2,600	3,163	2,851	4,353	16,591
Guyana	4,388,520	5,152,262	6,827,210	11,700,000	22,400,000	21,837,117
Indonesia	368,297	424,541	522,328	663,684	983,897	1,282,381
Iran (Islamic Republic of)	50,350	37,433	37,744	47,051	41,191	52,610
Kazakhstan	392	110	46	379	1,099	2,570
Kyrgyzstan	1,249,960	1,461,223	1,434,097	2,018,700	2,003,019	1,794,271
Malaysia	104,754	119,373	186,274	122,804	127,352	148,565
Maldives	540,697	626,554	515,472	594,566	644,659	655,245
Pakistan	384	253	193	1,207	1,626	2,724
Suriname	652,585	582,383	546,063	653,646	670,873	785,822
Tajikistan	11,409	12,296	15,026	15,026	15,030	14,755
Türkiye	13,808	8,958	6,700	10,732	59,852	144,103
Turkmenistan	48,130	49,492	53,978	45,676	36,976	41,462
Uzbekistan	14,301	24,583	29,862	35,156	44,827	29,809
Asian Group	8,572,252	10,187,317	12,411,537	18,958,346	30,731,751	31,340,979
OIC	12,311,446	14,640,298	17,993,122	25,545,609	38,391,032	41,080,067
World	124,928,828	136,488,433	151,518,162	166,876,014	199,741,129	174,600,000

Source: World Development Indicator

Annex 25: Capture Fisheries Production, Metric Tons

Country Name	1995	2000	2005	2010	2015	2020
Benin	44,379	32,324	31,497	39,791	36,477	73,965
Burkina Faso	8,000	8,500	9,000	14,520	20,750	29,104
Cameroon	94,131	112,109	142,345	181,000	224,000	281,630
Chad	90,000	83,200	77,000	91,000	100,000	107,000
Côte d'Ivoire	70,189	80,323	42,665	55,237	64,000	103,411
Gabon	40,437	47,826	43,863	32,692	33,000	29,000
Gambia	23,699	29,016	34,955	46,624	55,968	50,990
Guinea	67,860	91,513	109,138	113,504	126,000	309,570
Guinea-Bissau	6,328	6,315	6,983	6,584	6,700	62,392
Mali	132,900	109,870	100,000	100,000	92,480	117,690
Mozambique	27,375	41,530	83,996	162,555	286,587	401,904
Niger	3,616	16,250	50,018	40,000	27,000	46,000
Nigeria	349,482	441,377	523,182	616,981	710,331	783,102
Senegal	366,312	436,005	399,848	409,715	425,437	451,748
Sierra Leone	64,870	74,730	142,993	200,000	202,100	200,630
Togo	12,201	22,277	27,706	27,535	21,497	18,034
Uganda	208,789	219,356	416,758	413,805	396,205	566,261
African Group	1,610,568	1,852,521	2,241,947	2,551,543	2,828,532	3,632,431
Algeria	105,879	113,160	126,260	93,464	95,946	81,465
Bahrain	9,389	11,718	11,855	13,490	15,000	14,414
Comoros	13,109	12,003	10,738	63,447	12,674	20,755
Djibouti	350	800	1,571	1,590	2,012	2,323
Egypt	335,302	384,315	349,554	385,210	344,113	418,683
Iraq	28,208	20,767	26,008	19,348	27,296	34,770
Jordan	425	550	510	486	873	584
Kuwait	8,616	6,978	4,895	6,373	4,287	3,095
Lebanon	4,085	3,666	3,798	3,400	3,638	2,900
Libya	34,408	49,969	37,395	50,006	26,002	31,627
Mauritania	56,147	114,456	304,877	276,238	403,776	678,425
Morocco	856,812	914,824	1,039,210	1,143,652	1,370,231	1,397,533
Oman	139,861	120,421	157,326	163,927	257,022	793,419
Palestine	1,229	2,623	1,814	1,699	3,227	0
Qatar	4,271	7,140	13,935	13,760	15,203	15,087
Saudi Arabia	45,692	49,080	60,421	65,145	68,130	61,943
Somalia	32,400	24,150	25,000	30,000	30,000	30,000
Sudan	44,003	53,010	59,008	71,358	33,008	37,660
Syrian Arab Republic	5,782	6,572	8,447	6,637	4,100	3,845
Tunisia	83,256	94,671	109,153	93,179	119,017	103,253
United Arab Emirates	105,884	105,456	86,735	79,610	73,000	66,481
Yemen	107,970	114,750	238,400	163,861	180,813	131,307
Arab Group	2,023,078	2,211,079	2,676,910	2,745,880	3,089,368	3,929,569
Afghanistan	1,300	1,000	1,000	1,000	1,000	2,000
Albania	1,380	3,328	5,000	5,132	7,878	7,627
Azerbaijan	10,545	18,797	9,001	1,081	568	2,089
Bangladesh	792,389	1,004,264	1,333,866	1,726,586	1,623,837	1,919,505
Brunei Darussalam	4,719	2,487	2,709	2,351	3,370	13,091
Guyana	47,900	48,887	53,370	45,188	36,558	41,324
Indonesia	3,645,428	4,158,535	4,703,117	5,390,461	6,739,658	6,992,103
Iran (Islamic Republic of)	339,661	383,991	410,567	443,650	637,779	801,881
Kazakhstan	48,402	36,620	37,621	46,827	40,461	45,815
Kyrgyzstan	185	52	26	27	31	20
Malaysia	1,117,215	1,293,325	1,218,263	1,437,457	1,496,054	1,394,254
Maldives	104,754	119,373	186,274	122,804	127,352	148,565
Pakistan	525,849	614,069	434,850	454,465	493,485	492,783
Suriname	14,300	24,238	29,620	35,085	44,705	29,772
Tajikistan	100	167	167	690	1,176	1,949
Türkiye	630,978	503,352	426,496	485,925	431,909	364,411
Turkmenistan	9,740	12,228	15,000	15,000	15,000	14,605
Uzbekistan	3,611	3,306	2,900	4,078	22,956	46,100
Asian Group	7,298,456	8,228,019	8,869,847	10,217,807	11,723,777	12,317,894
OIC	10,932,102	12,291,619	13,788,704	15,515,230	17,641,677	19,879,894
World	93,696,572	94,763,863	93,697,963	88,855,994	93,736,945	90,300,000

Source: World Development Indicator

Annex 26: Fish and Fisheries Apparent Consumption, 2019

Country	Production Tonnes	Non-Food Uses Tonnes	Imports Tonnes	Exports Tonnes	Food Supply Tonnes	Per Capita Supply Kg/Year
Benin	52,730	0	119,110	180	171,660	16.67
Burkina Faso	22,330	0	138,820	580	160,570	7.74
Cameroon	235,500	0	226,940	4,570	457,870	17.15
Chad	107,470	0	480	110	107,840	6.76
Côte d'Ivoire	80,420	0	492,110	62210	510,320	19.84
Gabon	29,040	0	34,880	1150	62,770	29.4
Gambia	60,500	0	4050	3600	60,950	25.95
Guinea	130,250	0	5,980	8,810	127,420	9.98
Guinea-Bissau	6,740	0	1,860	7,000	1,600	1.19
Mali	110,140	0	72,030	3,150	179,020	8.79
Mozambique	331,160	0	42,520	15,340	358,340	11.75
Niger	34,930	0	10,600	610	44,920	1.93
Nigeria	1,212,470	0	611,600	5,510	1,818,560	8.66
Senegal	426,650	0	32,110	234,480	224,280	18.17
Sierra Leone	202,180	0	2,610	12,950	191,840	24.55
Togo	27,050	0	73,240	180	100,110	11.98
Uganda	501,970	0	7,430	45,350	464,050	10.48
African Group	3,571,530	0	1,876,370	405,780	5,042,120	13.59
Algeria	95,840	30	67,130	3,270	159,670	3.71
Bahrain						
Comoros	17,020	750	2,920	0	19,190	14.62
Djibouti	2,020	0	1,460	0	3,480	3.57
Egypt	1,822,800	0	521,230	47460	2,296,570	22.76
Iraq	67,030	0	60,130	160	127,000	3.75
Jordan	1,760	20	55,360	1,650	55,450	5.18
Kuwait	4,330	130	55,960	450	59,710	14.19
Lebanon	4,640	10	58,680	590	62,720	8.68
Libya	32,010	0	70,950	4,940	98,020	4.46
Mauritania	794,580,000	0	7,860	763,120	39,320	8.67
Morocco	1,136,980	100	93130	776,770	453,240	18.99
Oman	347,620	50,400	43,630	87,390	253,460	26.76
Palestine	..	..	..	..	..	..
Qatar	..	..	..	..	..	..
Saudi Arabia	123,000	40	400,110	66,340	456,730	10.95
Somalia	..	..	..	..	..	..
Sudan	47,390	0	2,550	2,050	47,890	1.08
Syrian Arab Republic	6,710	0	20,630	60	27,280	1.59
Tunisia	132,860	10	51,990	25,360	159,480	12.6
United Arab Emirates	76,260	78,330	352,380	98,740	251,570	25.68
Yemen	131,290	3,600	19,170	58,730	88,130	3.03
Arab Group	4,844,140	133,420	1,885,270	1,937,080	4,658,910	10.57
Afghanistan	9,000	0	0	0	9,000	0.24
Albania	12,690	0	35,400	23,020	25,070	8.64
Azerbaijan	1,650	0	30,060	210	31,500	3.13
Bangladesh	3,684,250	0	264,120	64,770	3,883,600	25.47
Brunei Darussalam	..	..	..	..	..	..
Guyana	43,670	0	3,030	27,620	19,080	25.08
Indonesia	12,938,740	66,140	599,250	1,199,280	12,272,570	43.7
Iran (Islamic Republic of)	1,203,060	90	83,970	132,320	1,154,620	11.45
Kazakhstan	32,720	10	58,450	36,430	54,730	2.79
Kyrgyzstan	2,190	0	6710	1,830	7,070	1.1
Malaysia	1,694,820	35,050	608,860	382,310	1,886,320	84.58
Maldives	143,260	13,700	6,470	91,120	44,910	56
Pakistan	679,450	100	14,130	218,190	475,290	1.66
Tajikistan	1,580	0	7,180	0	8,760	0.43
Türkiye	653,650	2,310	701,020	229,610	1,122,750	4.77
Turkmenistan	15,050	0	1,930	0	16,980	2.85
Uzbekistan	83,900	0	9,470	200	93,170	2.7
Suriname	47,090	13,000	4,240	28,650	9,680	16.7
Asian Group	26,431,320	345,760	4,743,100	4,555,470	26,273,190	17.15
OIC	34,846,990	479,180	8,504,740	6,898,330	52,386,900	13.77

Source: FAOSTAT

Annex 27: Agricultural Land Productivity (Agr. GDP at 2015 constant prices /Arable Land) (US Dollars per hectare)

Country Name	1995	2000	2005	2010	2015	2020
Benin	1,932.87	1,859.12	2,019.13	2,588.08	4,214.65	5,161.42
Burkina Faso	1,101.42	1,379.45	1,418.28	1,513.64	1,970.53	2,552.21
Cameroon	2,215.44	2,745.90	3,401.21	3,883.36	4,984.72	5,740.28
Chad	812.45	881.53	1,623.38	2,219.83	2,248.17	2,145.50
Côte d'Ivoire	6,122.40	7,766.69	7,766.81	8,832.46	13,079.99	17,431.60
Gabon	30,843.17	30,691.18	32,218.57	34,273.19	44,222.43	47,184.87
Gambia	4,160.42	3,382.55	3,378.58	3,001.32	3,132.22	3,722.02
Guinea	1,545.37	1,918.65	2,230.32	2,422.42	2,836.84	4,172.45
Guinea-Bissau	2,412.77	2,325.37	2,699.28	2,970.33	3,491.46	4,185.04
Mali	655.43	823.67	950.97	1,407.44	2,042.56	2,691.54
Mozambique	929.81	1,338.15	1,572.75	1,998.66	2,823.18	3,178.63
Niger	277.54	325.27	401.33	466.07	575.98	714.11
Nigeria	4,713.96	5,149.79	7,634.41	11,729.51	14,130.93	14,337.46
Senegal	2,518.04	2,941.34	3,925.29	3,841.12	5,550.44	7,088.90
Sierra Leone	5,179.78	3,005.31	1,819.88	2,187.30	2,681.89	3,161.08
Togo	1,032.83	1,095.77	1,106.85	1,260.50	2,017.25	2,539.75
Uganda	1,446.10	1,887.37	2,418.80	3,491.60	4,245.92	5,169.90
African Group	2,818.31	3,139.67	4,150.12	5,518.33	6,862.28	7,371.40
Algeria	10,840.15	12,604.77	16,559.82	18,791.92	22,242.95	22,429.13
Bahrain	6,147,200.95	7,723,957.41	13,244,601.48	16,272,644.34	19,406,648.94	20,571,353.52
Comoros	9,413.70	10,217.73	11,436.64	11,433.46	14,856.01	17,784.55
Djibouti	764,129.53	790,322.87	926,820.47	916,051.21	1,222,742.29	1,606,415.64
Egypt, Arab Rep.	47,342.68	61,415.75	80,458.48	96,856.34	110,871.66	118,187.10
Iraq	6,689.85	22,968.99	18,087.18	30,129.12	33,354.82	34,171.59
Jordan	62,291.13	96,740.41	135,310.90	189,886.41	169,315.57	199,552.02
Kuwait	10,890,681.93	6,126,266.25	8,225,476.37	9,586,097.62	14,881,113.02	13,042,913.61
Lebanon	134,248.20	201,119.04	221,596.21	396,918.59	376,435.68	259,297.21
Libya	26,694.53	29,390.07	42,311.72	48,965.77	28,210.48	11,520.51
Mauritania	6,303.92	6,986.91	10,422.87	11,003.24	15,417.16	17,141.95
Morocco	4,459.15	5,474.68	7,534.44	10,515.03	13,495.43	14,771.62
Oman	1,235,995.37	1,316,297.05	1,521,619.86	1,596,573.12	1,311,343.24	939,598.60
Palestine	48,808.16	69,787.98	88,283.84	253,601.83	242,492.19	200,793.70
Qatar	1,566,504.66	2,663,419.87	4,270,851.43	7,652,852.07	8,742,700.30	7,685,477.41
Saudi Arabia	92,150.56	101,769.76	127,133.31	160,116.91	187,469.84	189,689.62
Somalia	835.30	912.93	825.62	1,149.78	1,322.53	1,437.39
Sudan	1,851.03	2,530.90	3,169.24	3,628.45	4,179.94	4,442.63
Syrian Arab Republic	4,343.09	5,488.03	6,817.74	8,640.33	4,282.83	4,435.29
Tunisia	7,015.32	9,128.37	11,593.19	13,998.72	16,798.83	16,277.46
United Arab Emirates	3,231,632.28	3,171,195.81	3,631,945.84	5,497,480.97	8,120,973.80	7,568,694.78
Yemen	14,141.54	22,332.88	34,709.97	41,175.41	23,435.56	17,811.44
Arab Group	18,841.70	24,190.58	29,012.30	36,197.83	42,252.58	42,182.53
Afghanistan	827.77	695.65	1,229.42	1,891.90	2,409.92	2,569.05
Albania	8,180.27	10,479.67	14,976.42	16,645.80	18,512.31	20,916.44
Azerbaijan	4,991.12	6,633.83	12,176.06	25,470.50	27,391.36	24,607.51
Bangladesh	7,556.36	9,803.52	13,480.46	18,370.76	25,150.02	34,294.77
Brunei Darussalam	5,311,276.32	5,674,301.91	6,287,328.40	3,248,638.57	3,232,574.58	3,356,651.38
Guyana	3,171.15	3,869.38	6,458.37	8,670.12	10,190.10	17,323.55
Indonesia	21,963.77	19,268.90	21,687.08	27,874.38	36,170.35	39,072.35
Iran (Islamic Republic of)	11,808.20	16,617.94	19,313.44	26,635.60	28,406.77	28,089.66
Kazakhstan	1,686.00	2,194.33	3,794.59	5,109.49	6,229.11	6,964.70
Kyrgyzstan	1,975.08	2,594.78	3,299.86	4,124.34	5,214.88	5,622.29
Malaysia	130,227.37	170,681.62	196,857.49	272,332.55	365,141.32	416,010.71
Maldives	469,216.05	650,204.21	701,969.04	799,150.13	1,053,696.53	923,193.04
Pakistan	4,065.92	4,683.50	6,148.07	7,464.84	8,784.06	10,332.65
Suriname	43,984.12	48,390.08	71,902.48	82,428.87	78,865.20	71,246.66
Tajikistan	3,197.76	3,445.12	5,664.21	7,861.61	9,980.01	13,846.35
Türkiye	13,679.52	17,368.65	22,050.97	28,720.97	41,855.40	51,839.25
Turkmenistan	5,838.80	6,514.93	7,944.02	14,364.57	18,583.30	16,083.93
Uzbekistan	5,361.83	6,495.30	8,692.00	13,681.66	20,254.25	25,568.91
Asian Group	8,914.53	10,668.78	13,689.28	17,924.14	22,729.65	25,954.17
OIC	9,069.13	10,919.90	13,575.75	17,299.16	21,002.62	22,767.66
World	29,466.83	35,271.96	41,057.19	47,197.31	53,901.88	58,288.91

Source: FAOSTAT

Annex 28: Agricultural Labor Productivity, US Dollars Per Worker

Country Name	2000	2005	2010	2015	2019 [YR 2016]
Benin	641.17	1,202.74	1,542.34	1,756.72	212.17
Burkina Faso	196.78	477.74	900.70	1,494.58	1,826.89
Cameroon	392.70	526.80	801.07	1,008.19	1,188.43
Chad	195.22	1,190.69	1,800.22	1,698.73	1,070.25
Côte d'Ivoire	1,066.95	1,326.64	1,805.66	2,132.25	3,660.81
Gabon	2,735.53	3,660.31	3,778.44	3,499.72	4,943.46
Gambia	1,472.93	2,235.93	3,352.65	1,691.05	2,070.92
Guinea	326.96	320.95	537.90	669.28	1,244.78
Guinea-Bissau	462.65	687.43	895.09	1,008.95	823.49
Mali	347.94	667.56	997.97	1,333.96	1,514.45
Mozambique	161.81	264.58	383.14	451.35	443.26
Niger	230.10	414.94	560.46	575.24	775.70
Nigeria	765.05	2,272.72	4,082.70	5,212.97	5,083.01
Senegal	812.06	1,368.95	2,160.70	2,170.56	2,924.79
Sierra Leone	314.56	605.74	1,004.70	1,847.50	1,591.11
Togo	445.13	720.54	789.11	780.93	1,043.83
Uganda	299.20	351.24	1,141.84	759.64	682.31
African Group	263.70	1,141.77	1,967.58	2,222.15	2,197.25
Algeria	3,321.31	5,089.64	11,543.06	17,814.47	19,790.77
Bahrain	0.00	0.00	9,940.26	11,830.12	11,319.79
Comoros	1,494.93	2,459.41	3,141.87	3,000.91	3,576.62
Djibouti	0.00	0.00	0.00	222.92	342.63
Egypt	2,869.91	1,957.77	4,130.83	5,659.68	5,116.01
Iraq	1,652.21	2,297.53	4,895.68	4,259.92	4,487.17
Jordan	3,635.61	7,057.93	16,582.74	25,183.51	31,502.45
Kuwait	5,581.67	8,116.33	13,323.27	12,883.26	10,980.92
Lebanon	5,121.88	3,096.70	6,285.73	5,630.80	5,219.90
Libya	0.00	3,582.90	0.00	0.00	0.00
Mauritania	1,052.23	1,304.25	1,939.22	2,384.16	2,455.14
Morocco	1,237.65	1,714.45	2,844.84	3,209.67	3,822.76
Oman	9,188.45	7,046.70	11,816.03	12,210.13	14,484.19
Palestine	4,838.93	5,058.18	10,158.51	13,070.71	20,076.41
Qatar	7,610.34	3,828.39	7,161.65	10,871.67	15,925.20
Saudi Arabia	25,104.31	34,225.33	35,842.02	22,567.65	54,440.89
Somalia	0.00	0.00	0.00	0.00	0.00
Sudan	1,446.56	2,196.65	4,068.84	5,475.94	1,696.68
Syrian Arab Republic	3,222.03	5,591.18	0.00	0.00	0.00
Tunisia	3,820.55	5,396.39	5,585.76	9,037.89	8,998.17
United Arab Emirates	17,371.52	17,227.27	10,786.88	20,651.98	32,673.89
Yemen	903.88	1,477.41	2,296.88	2,040.46	0.00
Arab Group	2,442.59	2,794.92	4,304.22	5,344.88	4,724.71
Afghanistan	0.00	540.32	1,196.91	1,072.23	1,220.41
Albania	1,475.39	2,951.62	4,773.92	5,075.12	6,616.10
Azerbaijan	664.10	840.26	1,829.83	1,951.28	1,582.39
Bangladesh	416.21	502.20	750.56	1,108.50	1,482.69
Brunei Darussalam	34,155.56	56,387.50	83,733.33	101,828.57	49,192.59
Guyana	3,537.75	4,470.36	18,761.69	22,498.35	19,005.01
Indonesia	617.20	913.73	2,462.70	2,953.29	3,867.58
Iran (Islamic Republic of)	2,388.25	2,795.56	7,919.19	9,922.81	7,088.27
Kazakhstan	605.98	1,511.26	2,885.29	5,554.58	5,932.93
Kyrgyzstan	463.40	871.70	1,162.49	1,360.87	2,013.64
Malaysia	4,752.22	7,689.80	15,248.88	14,142.00	16,854.90
Maldives	0.00	4,364.56	7,010.58	10,163.56	12,511.44
Pakistan	1,157.61	1,304.50	1,660.49	2,404.84	2,367.61
Suriname	9,720.43	6,633.08	30,425.00	37,311.89	24,223.84
Tajikistan	279.00	569.39	1,144.25	1,827.14	1,758.15
Türkiye	3,495.68	9,059.74	13,045.79	10,882.59	9,219.60
Turkmenistan	1,359.97	2,875.38	4,737.42	6,348.53	9,629.39
Uzbekistan	1,216.53	1,003.57	3,575.93	6,946.46	4,287.99
Asian Group	979.55	1,461.09	2,770.34	3,300.66	3,464.58
OIC Total	794.21	1,520.68	2,692.68	3,189.30	3,169.09
World Total	1,073.42	1,453.46	2,568.42	3,477.31	3,987.96

Source: World Development Indicator

Annex 29. Wheat Yield, Tonnes/Ha

Country Name	1995	2000	2005	2010	2015	2020
Benin	1.17	1.15	1.14	1.10	1.28	0.00
Burkina Faso						0.00
Cameroon	1.32	1.34	1.34	1.38	1.32	1.33
Chad	1.00	1.43	1.50	2.50	1.40	1.81
Côte d'Ivoire						0.00
Gabon						0.00
Gambia						0.00
Guinea						0.00
Guinea-Bissau						0.00
Mali	2.10	2.35	2.20	2.55	3.94	5.30
Mozambique	1.14	1.00	1.11	1.34	1.08	1.15
Niger	3.44	2.00	1.74	1.99	2.07	2.59
Nigeria	2.18	1.40	1.10	1.48	1.00	1.10
Senegal						0.00
Sierra Leone						0.00
Togo						0.00
Uganda	1.80	1.71	1.67	1.67	1.60	1.54
African Group	0.83	0.73	0.69	0.82	0.81	0.87
Algeria	0.89	0.92	1.51	1.48	1.46	1.68
Bahrain						0.00
Comoros						0.00
Djibouti						0.00
Egypt	5.42	6.34	6.49	5.57	6.59	6.57
Iraq	0.81	0.32	0.87	1.99	2.86	2.91
Jordan	1.44	1.40	1.17	1.03	0.99	1.99
Kuwait	3.36	2.39	4.80	2.35	3.75	6.80
Lebanon	2.48	2.70	2.90	2.78	3.48	3.41
Libya	0.73	0.78	0.76	0.78	0.78	0.77
Mauritania	1.29	1.55	2.00	2.08	2.01	2.12
Morocco	0.55	0.48	1.03	1.71	2.47	0.90
Oman	2.37	3.19	3.19	4.13	2.99	2.53
Palestine	1.92	2.47	2.09	1.79	1.98	2.27
Qatar	2.30	2.31	2.33	2.25		2.00
Saudi Arabia	4.47	4.26	5.42	6.15	6.14	6.38
Somalia	0.37	0.37	0.39	0.39	0.40	0.40
Sudan	1.61	2.33	2.46	1.79	3.44	2.34
Syrian Arab Republic	2.55	1.85	2.45	1.93	2.06	2.11
Tunisia	1.28	1.17	1.69	1.89	1.40	1.72
United Arab Emirates	1.74	6.50	2.00	5.92	3.30	0.00
Yemen	1.68	1.62	1.31	1.78	1.67	1.76
Arab Group	1.69	1.95	2.04	2.17	2.17	2.21
Afghanistan	1.09	0.72	1.82	1.93	2.20	1.94
Albania	2.87	3.05	3.16	3.99	3.95	4.33
Azerbaijan	1.49	2.32	2.58	1.94	3.04	3.09
Bangladesh	1.95	2.21	1.75	2.40	3.09	3.10
Brunei Darussalam						0.00
Guyana						0.00
Indonesia						0.00
Iran (Islamic Republic of)	1.71	1.59	2.06	1.83	2.02	1.98
Kazakhstan	0.57	0.90	0.95	0.73	1.19	1.18
Kyrgyzstan	1.72	2.34	2.24	2.17	2.37	2.55
Malaysia						0.00
Maldives						0.00
Pakistan	2.08	2.49	2.59	2.55	2.73	2.87
Suriname						0.00
Tajikistan	0.89	1.18	1.96	3.02	3.03	3.15
Türkiye	1.93	2.29	2.33	2.44	2.88	2.96
Turkmenistan	1.59	2.41	3.15	1.70	0.87	1.65
Uzbekistan	2.14	2.72	4.21	4.60	4.82	4.56
Asian Group	1.11	1.35	1.60	1.63	1.79	1.85
OIC Mean	1.21	1.34	1.44	1.54	1.59	1.65
World Total	2.52	2.72	2.83	2.97	3.36	3.47

Source: FAOSTAT

Annex 30: Maize Yield, Tonnes/Ha

Country Name	1995	2000	2005	2010	2015	2020
Benin	1.17	1.15	1.14	1.10	1.28	1.27
Burkina Faso	1.14	1.75	1.81	1.43	1.79	1.69
Cameroon	1.55	2.46	2.13	1.97	1.74	1.77
Chad	0.88	0.75	1.09	0.82	1.15	1.20
Côte d'Ivoire	1.54	2.03	2.11	1.98	1.98	2.11
Gabon	1.55	1.62	1.55	1.57	1.57	1.60
Gambia	1.29	1.61	1.05	1.25	0.89	1.00
Guinea	1.20	1.42	1.54	1.63	1.25	1.40
Guinea-Bissau	1.00	0.99	1.08	1.05	1.05	1.00
Mali	1.28	1.33	1.49	2.69	2.53	3.01
Mozambique	0.68	0.94	0.50	1.20	0.80	0.71
Niger	1.26	0.62	0.83	0.79	1.22	1.76
Nigeria	1.27	1.30	1.66	1.85	1.56	1.59
Senegal	1.09	1.11	2.80	1.54	1.53	2.65
Sierra Leone	1.01	0.93	0.98	1.45	0.61	1.63
Togo	0.86	1.20	1.16	1.19	1.39	1.24
Uganda	1.60	1.74	1.59	2.30	2.35	2.77
African Group	1.20	1.35	1.44	1.52	1.45	1.67
Algeria	1.61	3.62	3.39	2.58	3.92	6.08
Bahrain	..	..	..	..	..	..
Comoros	2.27	2.20	2.14	2.09	2.03	2.05
Djibouti	1.67	1.83	1.50	1.85	1.90	1.89
Egypt	6.16	7.68	8.16	7.27	7.35	5.14
Iraq	1.43	0.76	2.31	2.36	3.18	4.14
Jordan	12.65	14.56	23.32	19.39	28.04	29.65
Kuwait	18.60	20.56	19.73	19.73	8.47	13.04
Lebanon	2.33	3.89	3.78	3.66	3.34	3.00
Libya	1.37	2.89	2.40	1.93	2.32	2.15
Mauritania	0.80	0.91	0.82	0.86	0.65	0.69
Morocco	0.13	0.40	0.20	1.21	0.75	0.42
Oman	7.34	7.49	7.64	7.78	11.96	8.11
Palestine	..	..	..	..	..	..
Qatar	12.58	12.52	12.48	20.76	12.50	12.46
Saudi Arabia	1.95	6.28	3.73	5.31	5.31	4.47
Somalia	0.83	1.46	1.18	1.51	0.56	0.75
Sudan	0.57	0.74	1.00	1.32	1.24	0.70
Syrian Arab Republic	3.60	3.44	3.68	3.51	3.18	4.50
Tunisia	..	..	..	..	..	0.00
United Arab Emirates	19.05	21.03	22.52	18.56	35.29	26.02
Yemen	1.36	1.48	0.81	1.68	1.14	1.08
Arab Group	5.07	5.99	6.36	6.49	7.01	5.74
Afghanistan	1.66	1.20	1.21	1.64	2.15	1.93
Albania	3.13	3.88	4.54	6.68	6.96	7.04
Azerbaijan	1.18	3.25	4.77	4.56	5.97	9.34
Bangladesh	1.07	2.06	5.33	5.84	6.98	8.51
Brunei Darussalam	..	..	..	..	..	..
Guyana	1.33	1.24	1.25	1.37	1.37	1.36
Indonesia	2.26	2.76	3.45	4.44	5.18	5.69
Iran (Islamic Republic of)	6.10	6.17	7.22	6.90	7.03	6.82
Kazakhstan	1.93	3.34	4.15	4.83	5.33	5.88
Kyrgyzstan	3.21	5.75	6.06	6.06	6.27	6.80
Malaysia	1.87	2.41	3.00	5.54	6.23	7.36
Maldives	1.00	2.38	3.33	4.55	3.33	4.21
Pakistan	1.69	1.71	2.98	3.81	4.42	5.97
Suriname	2.26	1.90	1.84	2.33	2.34	2.56
Tajikistan	1.94	2.70	4.05	12.05	10.58	13.52
Türkiye	3.73	4.16	7.00	7.26	9.33	9.41
Turkmenistan	3.47	0.97	0.94	1.70	1.37	0.90
Uzbekistan	3.51	2.65	4.89	8.18	11.78	9.76
Asian Group	2.43	2.85	3.88	5.16	5.68	5.95
OIC	2.90	3.40	3.89	4.39	4.71	4.45
World	3.81	4.32	4.82	5.19	5.52	5.75

Source: FAOSTAT

Annex 31: Cotton Seed Yield, Tonnes/Ha

Country Name	1995	2000	2005	2010	2015	2020
Benin	1.33	1.06	1.00	1.00	0.88	1.17
Burkina Faso	1.03	1.02	1.15	1.14	1.38	1.21
Cameroon	1.03	1.03	1.36	1.31	1.11	1.78
Chad	0.76	0.64	0.70	0.35	0.93	0.66
Côte d'Ivoire	1.03	1.38	1.12	0.93	1.12	1.11
Gabon	..	..	..	..	..	..
Gambia	0.42	0.51	0.39	0.38	0.36	0.35
Guinea	1.18	1.25	1.15	0.97	0.98	1.00
Guinea-Bissau	1.21	1.24	1.31	1.40	1.08	1.07
Mali	1.21	1.07	0.97	0.97	0.94	0.89
Mozambique	0.60	0.33	0.47	0.48	0.41	0.66
Niger	1.17	1.00	1.00	1.00	1.04	0.98
Nigeria	0.58	0.74	0.79	1.51	0.69	0.75
Senegal	0.90	0.92	1.18	0.94	1.01	1.12
Sierra Leone	..	..	..	..	..	..
Togo	1.06	0.83	0.79	0.71	0.72	0.65
Uganda	0.33	0.30	0.57	1.04	1.12	1.36
African Group	0.81	0.78	0.82	0.83	0.81	0.87
Algeria	0.50	0.45	0.39	0.31	0.31	0.27
Bahrain	..	..	..	..	..	..
Comoros	..	..	..	..	..	..
Djibouti	..	..	..	..	..	..
Egypt	2.14	2.54	2.04	24.35	31.63	3.31
Iraq	1.22	1.67	1.07	22.01	16.72	0.20
Jordan	..	..	..	..	..	..
Kuwait	..	..	..	..	..	..
Lebanon	..	..	..	..	..	..
Libya	..	..	..	..	..	..
Mauritania	..	..	..	..	..	..
Morocco	1.28	2.3	1.82	2.08	2.07	2.0755
Oman	..	..	..	..	..	..
Palestine	..	..	..	..	..	..
Qatar	..	..	..	..	..	..
Saudi Arabia	..	..	..	..	..	..
Somalia	0.41	0.40	0.40	0.40	0.40	0.40
Sudan	1.41	0.86	1.56	1.20	1.53	1.59
Syrian Arab Republic	2.94	4.00	4.30	2.74	0.66	2.65
Tunisia	1.76	1.36	1.12	0.87	0.66	0.66
United Arab Emirates	..	..	..	..	..	..
Yemen	0.96	1.04	1.17	1.26	1.07	1.03
Arab Group	0.57	0.66	0.63	0.61	0.52	0.55
Afghanistan	1.13	1.14	1.10	1.00	1.20	1.31
Albania	0.97	0.95	0.95	1.00	1.11	1.12
Azerbaijan	1.30	0.91	1.75	1.27	1.88	3.36
Bangladesh	1.17	2.50	2.98	3.10	3.30	3.40
Brunei Darussalam	..	..	..	..	..	..
Guyana	..	..	..	..	..	..
Indonesia	0.36	0.33	0.37	0.31	0.12	0.10
Iran (Islamic Republic of)	1.92	2.02	2.28	1.84	2.44	2.59
Kazakhstan	2.08	1.89	2.31	1.79	2.76	2.59
Kyrgyzstan	2.25	2.60	2.61	2.79	3.09	3.34
Malaysia	..	..	..	..	..	..
Maldives	..	..	..	..	..	..
Pakistan	1.8	1.87	2.04	2.09	1.68	1.66
Suriname	..	..	..	..	..	..
Tajikistan	1.52	1.41	1.55	1.91	1.69	2.03
Türkiye	2.94	3.46	4.11	4.48	4.72	1.19
Turkmenistan	2.13	1.79	1.67	2.34	1.04	4.94
Uzbekistan	2.64	2.08	2.61	2.56	2.59	2.90
Asian Group	1.23	1.28	1.46	1.47	1.53	1.70
OIC	0.87	0.91	0.97	0.97	0.96	1.04
World	1.60	1.67	2.00	2.18	2.09	2.61

Source: FAOSTAT

Annex 32: Renewable Water Potential 2018-2019

Country Name	Total renewable water resources (10 ⁹ m ³ /year)	Share of Renewable Water Resources to the Agricultural Land (m ³ /hectar in a year)	Long-term average precipitation in depth (mm/year) 2019
Benin	26.39	6,681.01	1,039.00
Burkina Faso	13.50	1,111.75	748.00
Cameroon	283.10	29,041.03	1,604.00
Chad	45.70	909.67	322.00
Côte d'Ivoire	84.14	3,968.87	1,348.00
Gabon	166.00	75,124.34	1,831.00
Gambia	8.00	13,223.14	836.00
Guinea	226.00	15,586.21	1,651.00
Guinea-Bissau	31.40	38,622.39	1,577.00
Mali	120.00	2,912.55	282.00
Mozambique	217.10	5,247.99	1,032.00
Niger	34.05	730.73	151.00
Nigeria	286.20	4,135.53	1,150.00
Senegal	38.97	4,389.50	686.00
Sierra Leone	160.00	40,516.59	2,526.00
Togo	14.70	3,848.17	1,168.00
Uganda	60.10	4,169.27	1,180.00
African Group	1,815.35	250,218.73	19,131.00
Algeria	11.67	282.13	89.00
Bahrain	0.12	13,488.37	83.00
Comoros	1.20	9,160.31	900.00
Djibouti	0.30	176.26	220.00
Egypt	58.30	14,750.24	51.00
Iraq	89.86	9,714.59	216.00
Jordan	0.94	915.42	111.00
Kuwait	0.02	133.02	121.00
Lebanon	4.50	6,710.35	661.00
Libya	0.70	45.60	56.00
Mauritania	11.40	287.44	92.00
Morocco	29.00	954.21	346.00
Oman	1.40	960.20	125.00
Palestine	0.84	1,882.70	402.00
Qatar	0.06	789.12	74.00
Saudi Arabia	2.40	13.83	59.00
Somalia	14.70	333.14	282.00
Sudan	37.80	545.22	250.00
Syrian Arab Republic	16.80	1,206.95	252.00
Tunisia	4.62	474.48	207.00
United Arab Emirates	0.15	388.16	78.00
Yemen	2.10	89.54	167.00
Arab Group	288.87	63,301.30	4,842.00
Afghanistan	65.33	1,715.98	327.00
Albania	30.20	25,768.37	1,485.00
Azerbaijan	34.68	7,255.40	447.00
Bangladesh	1,227.00	126,206.60	2,666.00
Brunei Darussalam	8.50	634,328.36	2,722.00
Indonesia	2,019.00	217,854.42	2,702.00
Iran (Islamic Republic of)	137.00	32,402.89	228.00
Kazakhstan	108.40	2,925.56	250.00
Kyrgyzstan	23.62	504.10	533.00
Malaysia	580.00	2,268.39	2,875.00
Maldives	0.03	67,670.05	1,972.00
Pakistan	246.80	4,687.50	494.00
Tajikistan	21.91	6,715.55	691.00
Türkiye	211.60	4,459.39	593.00
Turkmenistan	24.77	5,596.26	161.00
Uzbekistan	48.87	731.87	206.00
Guyana	271.00	1,911.01	2,387.00
Suriname	99.00	1,178,571.43	2,331.00
Asian Group	5,157.71	2,321,573.14	23,070.00
OIC	2,420.64	878,364.39	15,681.00
World	54,705.59	1,151,066.68	208,187.00

Source: FAOSTAT and AQUASTAT

Annex 33: Fertilizer use, Kilograms per Hectare of Arable Land

Country Name	1995	2000	2005	2010	2015	2020
Benin	20.11	14.79	0.46	9.13	0.13	40.21
Burkina Faso	7.19	9.17	15.24	9.43	16.29	17.18
Cameroon	5.03	7.73	8.00	9.24	13.59	13.39
Chad	..	..	..	..	..	..
Côte d'Ivoire	22.00	23.96	17.78	32.09	41.31	51.88
Gabon	1.23	0.92	8.34	3.16	27.34	21.27
Gambia	5.10	2.86	9.76	7.30	0.54	0.78
Guinea	1.87	1.17	0.92	0.93	0.91	6.86
Guinea-Bissau	..	..	..	..	..	..
Mali	8.13	8.92	14.92	18.51	27.50	37.24
Mozambique	2.14	3.67	1.43	8.20	4.56	11.21
Niger	0.71	0.32	0.39	0.50	0.41	0.59
Nigeria	5.56	5.36	7.20	12.21	8.22	19.61
Senegal	5.26	11.50	9.87	8.20	16.24	25.27
Sierra Leone	..	..	..	..	..	..
Togo	7.57	8.74	0.29	9.84	3.33	2.68
Uganda	0.26	1.25	0.97	1.72	1.59	2.44
African Group	6.58	7.17	6.83	9.32	11.57	17.90
Algeria	6.17	12.05	7.43	15.80	23.53	20.75
Bahrain	300.00	173.00	1,329.75	1,720.21	1,246.64	1,246.64
Comoros	..	..	..	..	..	..
Djibouti	..	..	..	..	..	..
Egypt	399.86	449.74	600.08	473.37	569.46	473.43
Iraq	69.56	90.54	42.07	34.29	15.47	54.83
Jordan	63.49	108.54	90.27	130.63	176.93	84.79
Kuwait	200.00	62.90	90.91	228.40	1,204.52	1,123.31
Lebanon	244.44	405.09	155.15	223.80	265.57	248.78
Libya	47.59	30.30	29.98	38.56	15.67	14.85
Mauritania	..	..	..	..	..	..
Morocco	31.63	41.91	63.79	57.17	70.49	58.19
Oman	278.57	185.68	597.77	542.30	396.97	329.56
Palestine	..	..	..	..	..	..
Qatar	461.54	38.46	83.33	300.07	124.32	238.10
Saudi Arabia	77.70	107.52	95.91	76.10	91.81	87.63
Somalia	..	..	..	..	..	..
Sudan	..	..	..	..	4.47	7.10
Syrian Arab Republic	71.23	80.47	84.95	33.02	0.75	6.64
Tunisia	27.09	38.86	45.46	47.43	53.11	56.53
United Arab Emirates	744.19	585.00	667.06	737.35	714.93	643.43
Yemen	8.02	9.84	3.81	19.46	1.79	10.63
Arab Group	189.44	151.24	249.23	292.37	292.73	276.78
Afghanistan	..	0.65	3.81	1.78	13.32	8.71
Albania	19.06	32.35	112.38	85.02	107.83	101.43
Azerbaijan	22.59	2.25	13.36	9.95	50.97	105.58
Bangladesh	142.19	158.11	197.75	212.96	298.97	320.91
Brunei Darussalam	..	..	308.50	431.75	177.25	177.25
Guyana	31.25	27.96	22.10	39.32	60.99	52.74
Indonesia	145.84	121.63	143.99	181.52	255.99	248.20
Iran (Islamic Republic of)	58.50	93.38	103.50	90.25	47.48	68.53
Kazakhstan	2.74	1.23	1.43	2.05	4.30	5.57
Kyrgyzstan	20.65	21.53	24.63	22.66	10.40	22.65
Malaysia	1,211.99	1,367.88	1,658.25	2,166.75	1,896.16	1,952.09
Maldives	..	..	29.67	94.36	61.18	71.73
Pakistan	82.57	95.44	123.48	138.30	137.47	155.15
Suriname	75.44	101.75	106.37	211.93	145.06	128.19
Tajikistan	82.94	11.35	16.50	9.59	21.99	96.75
Türkiye	68.97	87.67	86.76	98.38	106.67	149.64
Turkmenistan	61.49	54.65	81.89	172.76	268.28	167.57
Uzbekistan	105.92	163.21	149.30	205.39	248.69	254.51
Asian Group	142.14	146.32	176.87	231.93	217.39	227.07
OIC	112.72	101.58	144.31	177.87	173.90	173.91
World	97.42	101.63	116.40	130.84	136.45	146.40

Source: World Development Indicator

Annex 34: Average Dietary Energy Supply Adequacy, Percentage

Country Name	1999-2001	2004-2006	2009-2011	2014-2016	2016-2018	2018-2020
Benin	106	113	118	123	127	127
Burkina Faso	108	116	122	124	124	124
Cameroon	97	105	115	123	123	124
Chad	93	95	95	99	98	104
Côte d'Ivoire	115	120	117	119	123	132
Gabon	122	120	120	124	122	118
Gambia	116	112	122	119	119	108
Guinea	108	113	116	120	119	..
Guinea-Bissau	103	103	105	101	100	101
Mali	118	124	136	141	141	133
Mozambique	95	98	105	106	106	..
Niger	109	117	121	123	124	125
Nigeria	121	125	126	119	116	118
Senegal	98	101	109	110	114	119
Sierra Leone	95	98	106	111	110	104
Togo	99	103	108	112	113	110
Uganda	109	111	104	97	95	..
African Group	107	110	114	116	116	118
Algeria	124	128	135	146	146	151
Bahrain	..	..	..	..	..	..
Comoros	103	110	106	106	105	103
Djibouti	86	97	105	109	109	116
Egypt	146	144	149	152	153	143
Iraq	100	107	111	110	109	116
Jordan	114	126	122	115	114	109
Kuwait	143	146	141	139	136	138
Lebanon	141	131	128	114	114	119
Libya	136	134	135	139	139	..
Mauritania	120	118	125	126	124	128
Morocco	133	138	140	148	150	143
Oman	115	115	125	125	121	116
Palestine	..	..	..	..	..	..
Qatar	..	..	..	..	..	..
Saudi Arabia	136	128	130	136	130	136
Somalia	76	80	81	88	94	..
Sudan	..	..	..	111	111	117
Syrian Arab Republic	135	136	134	129	127	..
Tunisia	141	137	140	143	144	149
United Arab Emirates	131	122	117	126	128	115
Yemen	100	99	102	95	91	95
Arab Group	121	122	124	124	123	125
Afghanistan	89	95	101	96	96	105
Albania	115	116	124	127	127	135
Azerbaijan	97	117	123	130	131	131
Bangladesh	104	107	108	108	110	112
Brunei Darussalam	121	126	122	123	122	118
Guyana	121	118	114	119	119	125
Indonesia	108	109	116	123	126	127
Iran (Islamic Republic of)	132	127	128	130	131	129
Kazakhstan	116	124	131	137	138	143
Kyrgyzstan	107	115	117	120	120	117
Malaysia	125	121	122	125	125	123
Maldives	112	106	114	116	117	..
Pakistan	109	106	109	109	109	110
Suriname	109	111	116	116	115	115
Tajikistan	88	89	91	91	92	122
Türkiye	157	155	155	158	157	156
Turkmenistan	115	122	123	123	121	25
Uzbekistan	103	105	111	116	117	137
Asian Group	113	115	118	120	121	125
OIC	114	116	119	120	120	123
World	115	115	118	121	122	123

Source: FAOSTAT

Annex 35: Average Value of Food Production, US Dollars per Capita

Country Name	2000-2002	2005-2007	2010-2012	2016-2018
Benin	187	165	204	68
Burkina Faso	120	127	136	39
Cameroon	164	196	233	81
Chad	150	148	169	50
Côte d'Ivoire	262	258	262	85
Gabon	172	157	148	43
Gambia	91	76	82	22
Guinea	164	176	190	60
Guinea-Bissau	197	202	222	71
Mali	189	215	243	83
Mozambique	90	90	121	33
Niger	151	168	176	59
Nigeria	203	219	200	67
Senegal	96	89	106	34
Sierra Leone	74	123	168	63
Togo	107	114	128	39
Uganda	179	171	140	38
African Group	152.70	158.47	172.23	55.00
Algeria	132	176	228	72
Bahrain	33	23	24	9
Comoros	115	106	96	29
Djibouti	67	78	81	26
Egypt	221	249	244	79
Iraq	107	86	82	14
Jordan	146	163	161	48
Kuwait	71	83	94	29
Lebanon	288	252	207	52
Libya	168	171	179	58
Mauritania	..	..	..	..
Morocco	179	215	257	74
Oman	128	135	123	35
Palestine	179	158	118	37
Qatar	67	40	26	8
Saudi Arabia	130	133	118	34
Somalia	159	145	136	39
Sudan	..	..	44	55
Syrian Arab Republic	309	324	285	103
Tunisia	256	334	338	112
United Arab Emirates	247	116	57	23
Yemen	61	65	73	21
Arab Group	153.15	152.60	141.47	45.57
Afghanistan	114	113	110	33
Albania	261	306	395	161
Azerbaijan	180	218	256	90
Bangladesh	107	118	137	47
Brunei Darussalam	81	84	108	38
Guyana	421	404	469	175
Indonesia	166	199	230	80
Iran (Islamic Republic of)	276	339	310	104
Kazakhstan	341	403	414	150
Kyrgyzstan	277	276	270	90
Malaysia	382	438	470	156
Maldives	33	31	20	5
Pakistan	171	181	184	59
Suriname	174	183	236	80
Tajikistan	98	112	127	46
Türkiye	410	428	470	159
Turkmenistan	274	342	334	105
Uzbekistan	211	251	297	105
Asian Group	220.94	245.88	268.72	93.50
OIC	175.60	185.65	194.14	64.69
World	259.00	280.00	301.00	103.00

Source: FAOSTAT

Annex 36: Average Protein Supply, g per Capita per Day

Country Name	2000-2002	2005-2007	2010-2012	2016-2018	2017-2019
Benin	55.7	58.4	62.0	64.3	63.0
Burkina Faso	68.7	74.7	79.7	78.7	79.4
Cameroon	55.7	62.0	67.7	71.6	71.3
Chad	63.0	61.3	62.0	61.7	78.0
Côte d'Ivoire	51.0	55.0	57.3	57.7	60.0
Gabon	75.6	80.3	82.4	80.3	79.6
Gambia	58.3	58.0	63.3	64.7	63.3
Guinea	51.0	51.7	54.7	57.3	..
Guinea-Bissau	44.0	43.0	43.7	43.0	43.0
Mali	68.0	74.0	81.0	81.7	80.0
Mozambique	36.4	42.0	45.7	43.0	..
Niger	68.0	75.4	80.3	82.0	83.4
Nigeria	58.0	63.0	62.7	58.0	59.3
Senegal	55.6	57.7	59.3	62.0	63.7
Sierra Leone	44.4	50.3	55.3	50.3	49.3
Togo	49.6	52.0	56.4	57.7	56.0
Uganda	49.7	51.0	54.0	47.6	58.1
African Group	56.0	59.4	62.8	62.4	65.8
Algeria	77	83.3	88.4	92.3	89.3
Bahrain	33	23.0	24.0	9.0	..
Comoros	..	..	..	..	55.3
Djibouti	48.3	58.7	63.3	65.3	67.3
Egypt	94.3	97.7	102.7	97.0	96.6
Iraq	53.4	54.7	61.0	64.0	64.7
Jordan	76.1	80	81.0	70.0	66.3
Kuwait	102.3	114.6	104.5	100.7	100.3
Lebanon	91.3	83.3	79.0	69.3	70.0
Libya	..	..	..	..	..
Mauritania	..	..	..	..	81.4
Morocco	84	89.7	95.3	99.7	99.7
Oman	75.4	76.4	88.0	84.4	84.7
Palestine	..	..	..	..	..
Qatar	..	..	..	..	..
Saudi Arabia	82	83.7	89.7	88.3	87.7
Somalia	..	..	..	..	..
Sudan	..	..	23.2	72.3	74.7
Syrian Arab Republic	..	..	..	..	..
Tunisia	89.3	90.7	98.0	99.7	99.7
United Arab Emirates	108.8	103.6	99.7	111.7	81.3
Yemen	57	55.7	58.3	52.0	51.7
Arab Group	76.6	78.2	77.1	78.4	79.4
Afghanistan	51.4	54.0	58.0	55.7	57.7
Albania	93	97.3	108.3	116.7	114.0
Azerbaijan	68.3	84.7	90.0	92.0	93.7
Bangladesh	49	52.0	54.3	59.7	60.3
Brunei Darussalam	87.4	85.0	87.4	..	..
Guyana	76.7	73.7	75.7	84.7	85.7
Indonesia	52.3	54.3	60.3	66.7	68.7
Iran (Islamic Republic of)	81.7	83.7	86.0	85.3	83.0
Kazakhstan	88	91.3	96.0	91.0	102.4
Kyrgyzstan	83.7	82.3	85.0	83.3	84.0
Malaysia	75.3	78.7	79.3	77.3	76.7
Maldives	100.7	91.6	115.4	85.5	..
Pakistan	59.3	60.4	63.7	65.7	66.0
Suriname	56.3	58.0	62.3	60.7	64.4
Tajikistan	49.0	50.7	54.7	53.3	71
Türkiye	103.7	102.7	104.7	109.3	110.3
Turkmenistan	81.4	90.0	90.7	89.3	89.3
Uzbekistan	66.3	73.7	80.3	93.3	99
Asian Group	74.0	75.8	80.7	80.5	82.9
OIC	68.7	71.1	73.5	73.8	73.4
World	72.6	74.5	77.8	80.1	82.2

Source: FAOSTAT

Annex 37 Number of People Undernourished, Million People

Country Name	1999-2001	2004-2006	2009-2011	2014-2016	2016-2018	2019-2021
Benin	2.0	1.2	1.1	1.0	1.1	0.9
Burkina Faso	3.0	3.3	3.3	3.6	3.8	3.8
Cameroon	4.7	3.5	2.3	1.8	2.4	1.8
Chad	3.3	3.9	4.8	5.1	5.6	5.4
Côte d'Ivoire	3.4	3.7	4.5	4.7	4.6	1.2
Gabon	0.1	0.2	0.2	0.2	0.2	0.4
Gambia	0.2	0.2	0.2	0.2	0.2	0.5
Guinea	2.3	2.1	1.9	1.8	2.1	..
Guinea-Bissau	0.3	0.3	0.3	0.5	0.5	0.6
Mali	1.6	1.4	1	1	1.2	2.0
Mozambique	7.4	7.8	6.9	7.6	8.3	..
Niger	2.5	2.1	1.8	2.3	3.6	4.8
Nigeria	11.4	9.1	9.9	17.4	25.6	26.2
Senegal	2.8	2.4	1.7	1.9	1.8	1.2
Sierra Leone	1.8	2.1	1.7	1.7	1.9	2.2
Togo	1.5	1.5	1.4	1.3	1.3	1.6
Uganda	6.7	6.9	10.5	15.1	17.6	..
African Group	55	52	54	67	82	53.0
Algeria	3.3	2.9	2.3	1.6	1.6	..
Bahrain	..	..	..	..	..	..
Comoros	..	..	..	..	..	0.2
Djibouti	0.3	0.3	0.2	0.2	0.2	0.1
Egypt	3.7	4.2	3.8	4.1	4.4	5.2
Iraq	6.7	7.6	8.4	10.2	11.1	6.4
Jordan	0.6	0.4	0.6	1.1	1.2	1.7
Kuwait	..	..	..	..	0.1	0.1
Lebanon	..	0.1	0.2	0.6	0.7	0.7
Libya	..	..	..	..	..	..
Mauritania	0.3	0.4	0.3	0.4	0.5	0.5
Morocco	2	1.7	1.7	1.2	1.2	2.1
Oman	0.3	0.3	0.2	0.2	0.3	0.5
Palestine	..	..	..	..	..	..
Qatar	..	..	..	..	..	..
Saudi Arabia	1.3	1.9	1.9	1.8	2.3	1.3
Somalia	..	..	..	..	..	..
Sudan	0	0	0	7.8	8.2	5.6
Syrian Arab Republic	..	..	..	..	..	..
Tunisia	0.5	0.6	0.5	0.5	0.5	0.4
United Arab Emirates	..	0.2	0.5	0.3	0.2	0.6
Yemen	5.3	6.2	6.1	9.3	11	12.3
Arab Group	24.3	26.8	26.7	39.3	43.5	37.7
Afghanistan	9.3	8.3	6.4	9.6	10.6	11.6
Albania	0.2	0.3	0.2	0.2	0.2	0.1
Azerbaijan	1.9	0.5	..	..	..	..
Bangladesh	27.3	23.8	25.7	25.3	24.2	18.8
Brunei Darussalam	..	..	..	..	..	<0.1
Guyana	..	..	..	..	..	<0.1
Indonesia	39.2	44.1	32.3	22.5	22	17.7
Iran (Islamic Republic of)	3.3	4.3	4.4	4.1	4	3.4
Kazakhstan	0.9	0.9	0.5	..	..	..
Kyrgyzstan	0.8	0.5	0.4	0.4	0.4	0.3
Malaysia	0.7	1	1.1	0.9	0.8	..
Maldives	..	..	..	..	..	..
Pakistan	32.5	35.9	35.9	39.3	40	37.2
Suriname	..	..	..	..	..	<0.1
Tajikistan	..	..	..	..	..	0.8
Türkiye	..	..	..	..	..	..
Turkmenistan	0.4	0.2	0.2	0.3	0.3	0.2
Uzbekistan	4	3.9	2.6	2	2	..
Asian Group	120.5	123.7	109.7	104.6	104.5	90.1
OIC Total	199.3	202.2	189.9	211.1	229.8	180.4
World Total	916.3	940.5	826.1	790.2	809.9	702.7

Source: FAOSTAT

Annex 38: Gross Domestic Product per capita, in Purchasing Power Equivalent, Constant 2011 US Dollars

Country Name	2000	2005	2010	2015	2020
Benin	2,478	2,582	2,705	2,946	3,323
Burkina Faso	1,297	1,527	1,716	1,925	2,161
Cameroon	2,751	2,982	3,086	3,459	3,576
Chad	897	1,618	1,733	1,857	1,520
Côte d'Ivoire	4,094	3,670	3,661	4,417	5,174
Gabon	16,567	15,761	14,415	15,510	14,400
Gambia	2,271	2,216	2,347	2,059	2,159
Guinea	1,705	1,794	1,871	2,088	2,671
Guinea-Bissau	1,723	1,678	1,747	1,800	1,848
Mali	1,628	1,959	2,083	2,140	2,216
Mozambique	631	821	1,027	1,262	1,229
Niger	933	962	1,037	1,132	1,197
Nigeria	2,977	3,997	4,932	5,515	4,917
Senegal	2,595	2,758	2,797	2,967	3,300
Sierra Leone	1,063	1,245	1,414	1,552	1,648
Togo	1,700	1,574	1,626	1,921	2,108
Uganda	1,253	1,480	1,861	2,054	2,178
African Group	2,739	2,860	2,945	3,212	3,272
Algeria	8,711	10,505	10,971	11,697	10,682
Bahrain	49,406	47,493	44,600	48,111	40,933
Comoros	2,834	2,816	2,878	2,960	3,141
Djibouti	..	..	..	4,489	5,481
Egypt	7,745	8,397	10,340	10,570	11,951
Iraq	9,365	7,542	8,749	10,122	9,255
Jordan	8,741	10,577	11,316	10,146	9,817
Kuwait	54,985	68,234	58,810	54,834	..
Lebanon	14,362	14,264	19,499	16,299	11,649
Libya	16,746	19,884	22,540	11,022	10,282
Mauritania	..	..	..	..	..
Morocco	4,371	5,228	6,282	7,127	6,916
Oman	33,840	31,910	33,865	30,147	..
Palestine	4,503	4,866	5,411	6,049	5,394
Qatar	86,566	87,722	95,908	95,965	85,266
Saudi Arabia	41,955	44,310	44,037	48,921	44,328
Somalia	..	..	..	879	830
Sudan	2,110	2,502	3,089	4,188	4,023
Syrian Arab Republic	..	..	..	..	..
Tunisia	7,329	8,523	10,113	10,510	9,728
United Arab Emirates	102,495	90,895	54,922	65,219	..
Yemen	..	..	..	..	..
Arab Group	26,827	27,392	26,078	23,645	16,855
Afghanistan	..	1,287	1,957	2,068	1,979
Albania	5,893	8,041	10,750	11,879	13,295
Azerbaijan	4,064	7,222	14,313	14,854	13,700
Bangladesh	1,938	2,280	2,884	3,700	4,818
Brunei Darussalam	69,023	69,788	67,753	63,148	62,244
Guyana	7,776	7,965	9,789	11,262	18,680
Indonesia	5,689	6,699	8,287	10,150	11,445
Iran (Islamic Republic of)	10,067	11,998	13,806	12,698	12,433
Kazakhstan	10,276	16,536	20,751	24,290	25,337
Kyrgyzstan	3,079	3,558	4,141	4,805	4,706
Malaysia	15,917	18,114	20,536	24,787	26,435
Maldives	13,359	12,608	16,306	17,285	13,049
Pakistan	3,245	3,707	3,907	4,278	4,623
Suriname	13,068	15,908	18,840	19,317	16,130
Tajikistan	1,325	1,924	2,390	2,985	3,658
Türkiye	15,434	18,252	20,028	25,959	28,385
Turkmenistan	4,622	5,629	8,617	12,994	..
Uzbekistan	2,786	3,405	4,652	6,087	6,994
Asian Group	11,033	11,940	13,873	15,141	15,759
OIC	13,533	14,064	14,298	13,999	11,962
World	11,080	12,461	13,891	15,510	16,194

Source: FAOSTAT

Annex 39: Percentage of Population with Access to Improved Water Source

Country	1988-1992	1993-1997	1998-2002	2003-2007	2008-2012	2013-2017	2019-2021
Benin	59.1	63.4	67.7	72.0	76.2	77.9	..
Burkina Faso	45.4	54.3	63.6	72.8	81.7	82.3	47.2
Cameroon	53.4	58.6	63.8	69.0	74.1	75.6	65.7
Chad	40.8	43.3	45.7	48.2	50.7	50.8	..
Côte d'Ivoire	76.3	77.3	78.5	79.8	81.2	81.9	..
Gabon	..	81.2	85.6	89.3	92.2	93.2	85.3
Gambia	77.2	80.7	84.0	87.1	90.1	90.2	..
Guinea	54.5	59.6	64.8	69.8	74.8	76.8	..
Guinea-Bissau	39.1	47.1	55.5	64.3	73.6	79.3	59.0
Mali	31.0	40.6	50.6	60.8	70.9	77.0	82.5
Mozambique	35.6	38.9	42.6	46.3	50.1	51.1	63.4
Niger	35.7	40.7	45.7	50.8	56.2	58.2	46.9
Nigeria	42.4	48.3	54.2	60.1	65.5	68.5	77.6
Senegal	61.4	65.2	68.9	72.6	76.3	78.5	84.9
Sierra Leone	38.8	44.0	49.2	54.3	59.5	62.6	63.8
Togo	48.7	51.7	54.8	57.9	61.1	63.1	68.6
Uganda	43.6	51.6	59.6	67.7	75.8	79.0	55.9
African Group	46.1	55.7	60.9	66.05	71.2	73.3	66.7
Algeria	91.7	90.5	88.8	87.0	84.9	83.6	94.4
Bahrain	94.9	97.1	100.0	100.0	100.0	100.0	..
Comoros	90.1	90.1	90.1	90.1	90.1	90.1	..
Djibouti	78.2	80.2	83.7	87.1	89.9	90.0	..
Egypt	93.9	95.1	96.4	97.6	98.8	99.4	..
Iraq	78.1	78.9	81.3	83.7	86.1	86.6	..
Jordan	96.5	96.7	96.8	96.9	96.9	96.9	..
Kuwait	99.0	99.0	99.0	99.0	99.0	99.0	..
Lebanon	..	83.3	88.1	94.1	99.0	99.0	92.6
Libya	71.2	71.2	71.2	..	..	..	99.0
Mauritania	31.8	38.2	44.6	50.7	56.7	57.9	71.7
Morocco	74.0	76.9	79.3	81.9	84.6	85.4	90.4
Oman	79.3	81.8	85.5	89.4	93.3	93.4	92.2
Palestine	95.8	96.0	86.7	76.0	65.1	58.4	97.9
Qatar	98.7	98.8	99.4	99.9	100.0	100.0	99.0
Saudi Arabia	92.3	94.0	95.7	97.0	97.0	97.0	99.0
Somalia	..	21.1	25.3	30.7	31.7	..	56.5
Sudan	..	..	..	..	55.5	55.5	60.4
Syrian Arab Republic	85.8	86.7	88.0	89.1	90.1	90.1	93.9
Tunisia	84.2	87.9	91.1	94.1	96.9	97.7	97.5
United Arab Emirates	99.7	99.7	99.7	99.6	99.6	99.6	99.0
Yemen	65.1	61.9	58.5	55.0	54.9	..	60.7
Arab Group	72.7	78.4	79.5	77.2	80.5	76.3	86.9
Afghanistan	21.3	25.0	33.8	42.6	51.6	55.3	75.1
Albania	..	95.8	96.1	95.9	95.4	95.1	..
Azerbaijan	68.9	71.7	75.8	80.2	84.5	87.0	..
Bangladesh	69.7	73.6	77.5	81.3	84.8	86.9	97.7
Brunei Darussalam	..	..	..	..	..	..	..
Guyana	80.0	83.9	87.8	91.8	95.9	98.3	99.0
Indonesia	71.2	75.4	79.3	82.6	85.7	87.4	..
Iran (Islamic Republic of)	92.4	93.5	94.5	95.4	96.0	96.2	..
Kazakhstan	94.1	93.9	93.7	93.4	93.1	92.9	97.5
Kyrgyz Rep.	74.5	76.3	80.0	83.8	87.6	90.0	95.4
Malaysia	91.1	93.0	94.8	96.4	97.9	98.2	91.7
Maldives	93.2	94.2	95.9	97.5	98.6	98.6	97.1
Pakistan	86.7	87.8	88.9	89.9	90.9	91.4	99.0
Tajikistan	..	57.2	61.5	66.6	71.7	73.8	90.1
Türkiye	87.1	90.6	93.8	96.9	99.5	100.0	98.0
Turkmenistan	..	59.3	59.9	60.4	..	..	81.9
Uzbekistan	89.9	89.2	88.4	87.5	87.3	..	97.0
Suriname	..	88.4	90.3	92.6	94.8	94.8	97.8
Asian Group	56.7	74.9	77.3	79.7	78.6	74.7	94.0
OIC	58.5	69.7	72.5	74.3	76.7	74.8	82.6
World	67.7	77.3	79.8	82.0	83.8	82.7	88.5

Source: FAOSTAT

Annex 40: Per Capita Food Supply Variability, kcal/capita/day

Country Name	2000	2005	2010	2015	2020
Benin	46	51	39	11	..
Burkina Faso	53	56	36	14	28
Cameroon	17	14	12	23	34
Chad	78	26	40	49	..
Côte d'Ivoire	37	20	65	49	..
Gabon	46	38	49	65	39
Gambia	56	69	73	42	..
Guinea	68	28	40	54	..
Guinea-Bissau	77	22	19	92	28
Mali	15	26	31	54	32
Mozambique	30	26	32	50	50
Niger	32	32	21	44	38
Nigeria	17	19	14	29	10
Senegal	31	28	57	45	27
Sierra Leone	60	19	19	69	38
Togo	33	24	8	18	29
Uganda	59	53	46	32	55
African Group	44.4	32.4	35.4	43.5	34.0
Algeria	..	..	..	..	42
Bahrain	..	..	..	..	..
Comoros	..	41	39	27	..
Djibouti	26	39	21	10	..
Egypt	22	58	37	41	..
Iraq	35	59	34	38	..
Jordan	52	101	55	82	..
Kuwait	94	34	111	71	..
Lebanon	51	28	62	169	21
Libya	..	..	..	..	19
Mauritania	..	..	..	..	21
Morocco	63	43	22	37	27
Oman	70	30	32	60	47
Palestine	..	..	..	..	34
Qatar	..	..	..	..	0
Saudi Arabia	26	22	74	65	32
Somalia	..	9	38	146	15
Sudan	..	24	16	60	23
Syrian Arab Republic	..	..	..	36	54
Tunisia	75	29	29	25	11
United Arab Emirates	73	92	55	70	23
Yemen	11	24	15	56	62
Arab Group	49.8	42.2	42.7	62.1	28.7
Afghanistan	52	52	21	93	26
Albania	73	62	60	105	..
Azerbaijan	87	29	81	21	..
Bangladesh	70	21	21	7	39
Brunei Darussalam	51	65	42	26	31
Guyana	44	45	39	57	..
Indonesia	42	9	22	27	..
Iran (Islamic Republic of)	27	24	33	69	49
Kazakhstan	68	32	33	25	69
Kyrgyzstan	92	101	55	26	29
Malaysia	23	29	25	42	27
Maldives	34	60	59	65	47
Pakistan	19	54	21	12	14
Suriname	43	21	26	44	32
Tajikistan	15	12	9	24	31
Türkiye	39	20	19	12	19
Turkmenistan	18	48	29	53	10
Uzbekistan	21	50	71	35	52
Asian Group	45.4	40.8	37.0	41.3	33.9
OIC	46.6	38.5	38.3	49.0	32.2
World	48.9	39.4	36.1	34.0	29.2