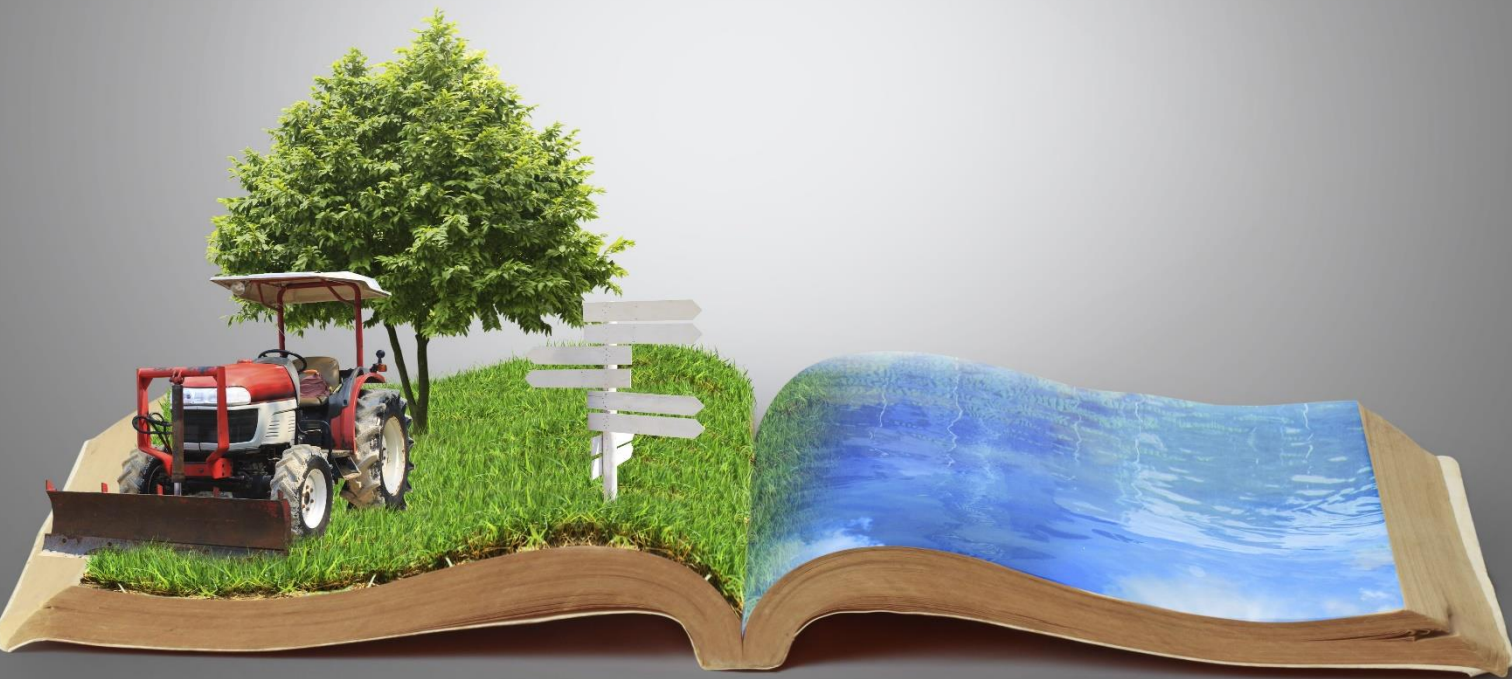


COMCEC AGRICULTURE OUTLOOK 2021



**COMCEC COORDINATION OFFICE
November 2021**



**Standing Committee
for Economic and Commercial Cooperation
of the Organization of Islamic Cooperation (COMCEC)**

COMCEC

AGRICULTURE OUTLOOK 2021

**COMCEC COORDINATION OFFICE
November 2021**

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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 2021 is revised and updated by Prof. Dr. Hami Alpas (Food Engineering Dept., METU, Ankara-Turkey) Consultant for the Agriculture Working Group to the COMCEC Coordination Office and Dr. Filiz Yeni 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 sector 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 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.

COVID 19 has also disrupted the global food system and emphasized its structural inequity – from unequal food distribution to global lockdowns and to workers in the food system going hungry. 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 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.

Agriculture is one of the leading sectors in terms of its contribution to income, employment, and trade in most of the OIC member countries. In 2019, OIC agricultural gross domestic production (GDP) reached 673 billion US Dollars with a share of 19 percent in the world's agricultural production. Furthermore, the number of people employed in the agricultural sector in the OIC member countries reached 212 million in 2019, which accounts for 24 percent of world's agricultural employment. In 2019, the number of people employed in agriculture decreased 36 million and reached to 212 million people. Most of the OIC member countries have trade deficits in agriculture and as of 2019, 23.3 billion US Dollars trade deficit occurred in the OIC with an export/import ratio of around 65% where most of the OIC member countries still have trade deficits in agriculture. Thus, agricultural sector is of critical importance for many OIC member countries for generating income, increasing welfare, eradicating extreme poverty and hunger especially under the impact of COVID 19.

This report highlights the recent state of agricultural sector by analyzing macro agricultural indicators, sectoral indicators and state of food security in the OIC member countries under the ongoing and post impacts of COVID 19. 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. Lastly, a new section titled '*Transforming Food Systems After COVID-19: Post COVID-19 Effects on Agriculture in OIC*' was added.

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, 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.

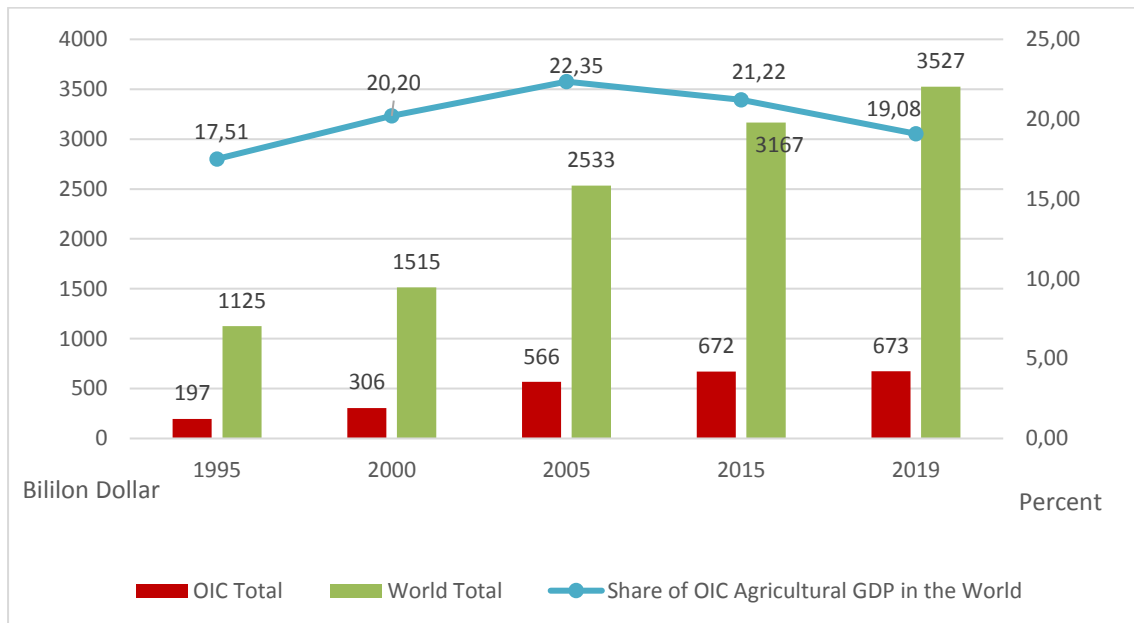
1.1 Agricultural Value Added

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 welfare.¹ 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 goods.² In line with the theory of economic development, this characteristic of agriculture can be clearly observed in the OIC as a whole.

¹ COMCEC, 2012

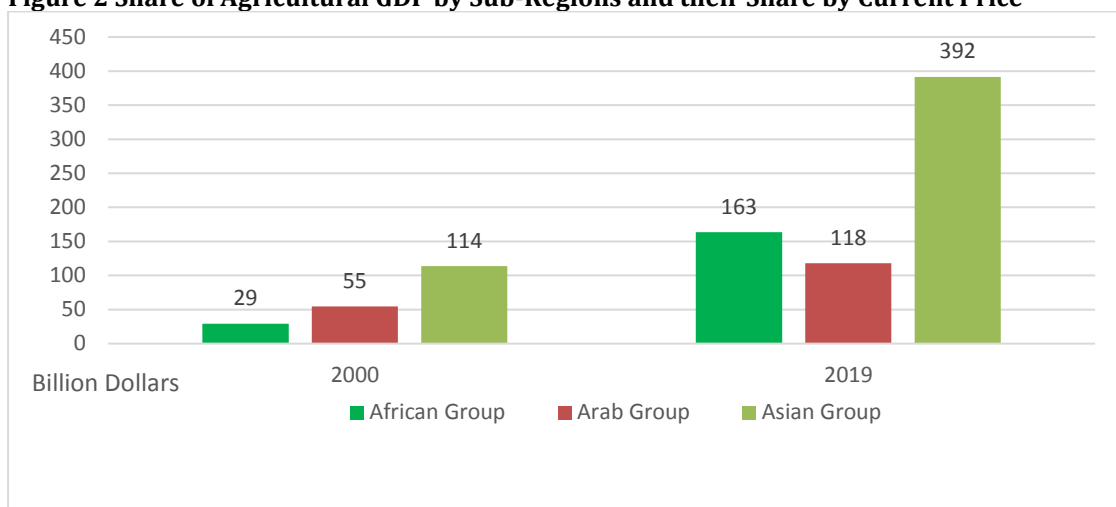
² Cervantes-Godoy and Dewbre

Figure 1 OIC Agricultural GDP and its Share in the World


Source: Annexes 2-6

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 1995, OIC agricultural GDP was 197 billion US Dollars with a share of 17.51 percent in the world's agricultural production. In 2019, OIC agricultural GDP reached 673 billion US Dollars with a share of 19.08 percent in the world's agricultural production. This figure is important because it shows the increasing importance of OIC agriculture in the world. However, OIC member countries have a relatively lower performance in agriculture sector since, according to FAO, OIC member countries own 28.31 percent of total world agricultural area as of 2019. Therefore, the potential of agricultural sector in OIC member countries could be more effectively utilized to increase their share in world agricultural output.

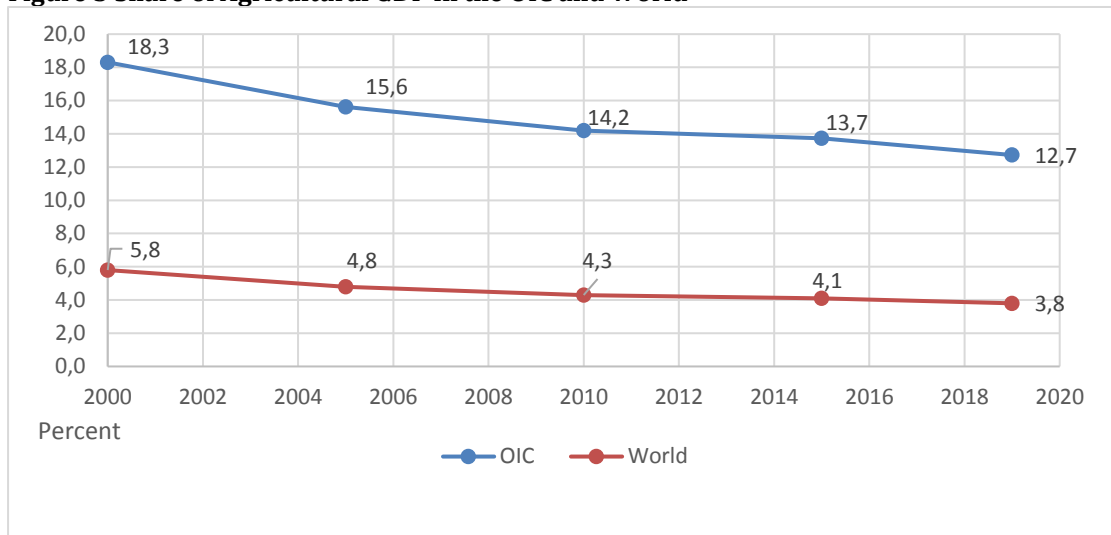
Figure 2 Share of Agricultural GDP by Sub-Regions and their Share by Current Price



Source: Annexes 2-6

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 2000-2018. Also, Asian Group has the highest contribution to agricultural production over the years.

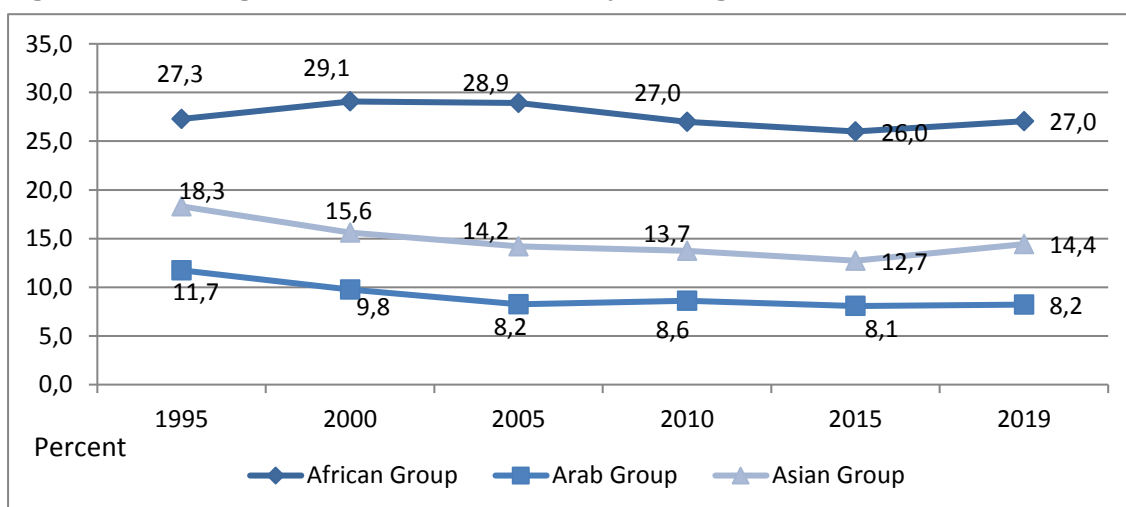
As of 2019, OIC agricultural GDP reached to 673 billion US Dollars and the contribution of Asian group to this value is 392 billion US Dollars which is more than half of the total agricultural GDP of the OIC Member Countries. Hence, Asian Group has the highest amount of the agricultural GDP, and followed 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 24.22 percent from 9.48 percent. On the other hand, the share of Arab Group agricultural GDP in OIC agricultural GDP stayed almost the same with 17.97 percent in 2000 and 17.53 percent in 2019. Share of Asian group increased from 37.25 to 58.25 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 15.6 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 2020, 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 12.71 percent. In the top ten country rankings, Nigeria 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	Turkey	59,4	9,62	Turkey	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	

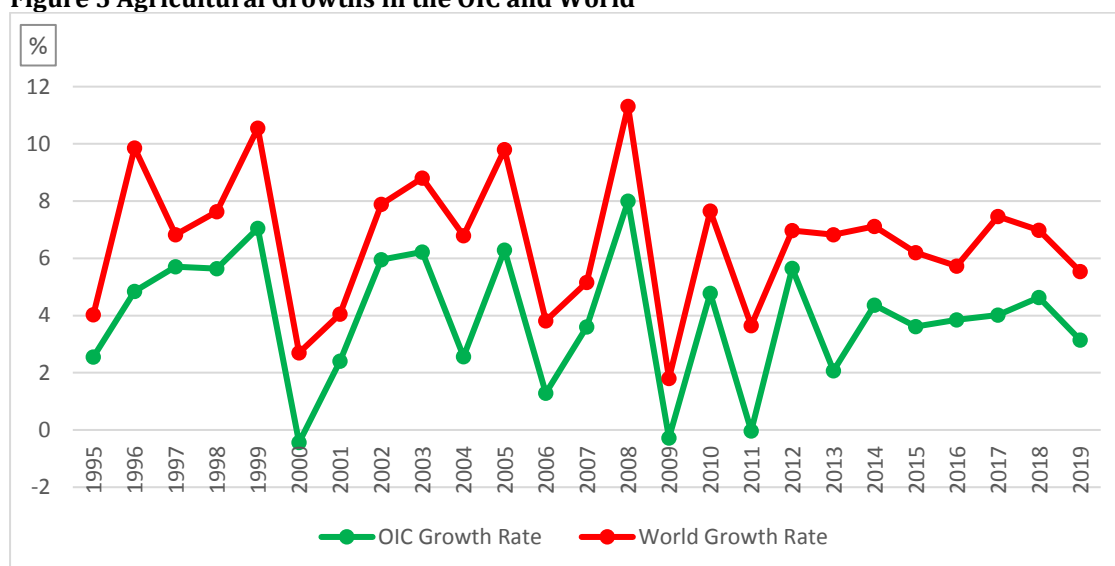
Source: Annexes 2-6

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 a 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 1995-2019. 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 1995-2004 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.

Agriculture sector should provide enough food for the growing population in the world and especially in the OIC. In the last 20 years, the agricultural GDP expanded globally by an average of 2.78 percent a year, more than the population growth of 0.85 percent. In the same period, OIC Member Countries have experienced yearly 2.85 percent growth in agricultural GDP, and 1.31 percent of growth in population. Therefore, both in the OIC and world, the growth rate in agriculture sector is higher than the growth rate in population which enables to feed much more people.

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

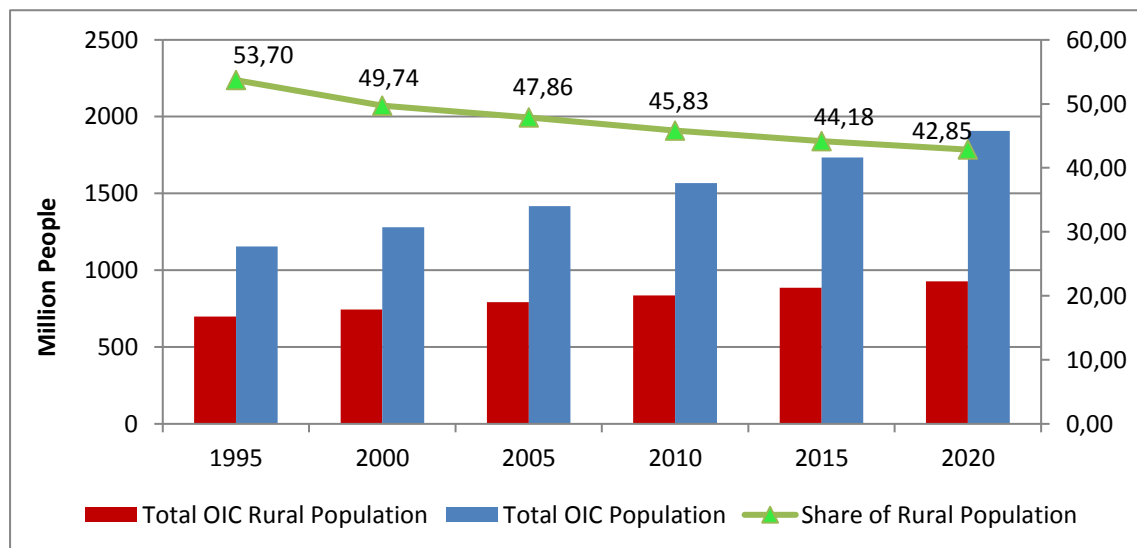
Table 4 presents the sub-regional average yearly growths in 10-year periods within the last two decades in OIC member countries. Compared to the world, all three OIC sub-regions have

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 54 percent share in total population, it increased to almost 928 million people, constituted 43 percent of the total OIC population in 2020. 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.

In general terms, the share of rural population in total population is decreasing in the OIC as well as in all sub-regions. Within the sub-regions, the share remained higher in the African Group with 55,65 percent and the lowest level was Arab Group with 29.90 percent in 2020 (Figure 6).

Figure 6 Share of Rural Population in the OIC



Source: Annex 7 and 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.³

³ SESRIC, 2016

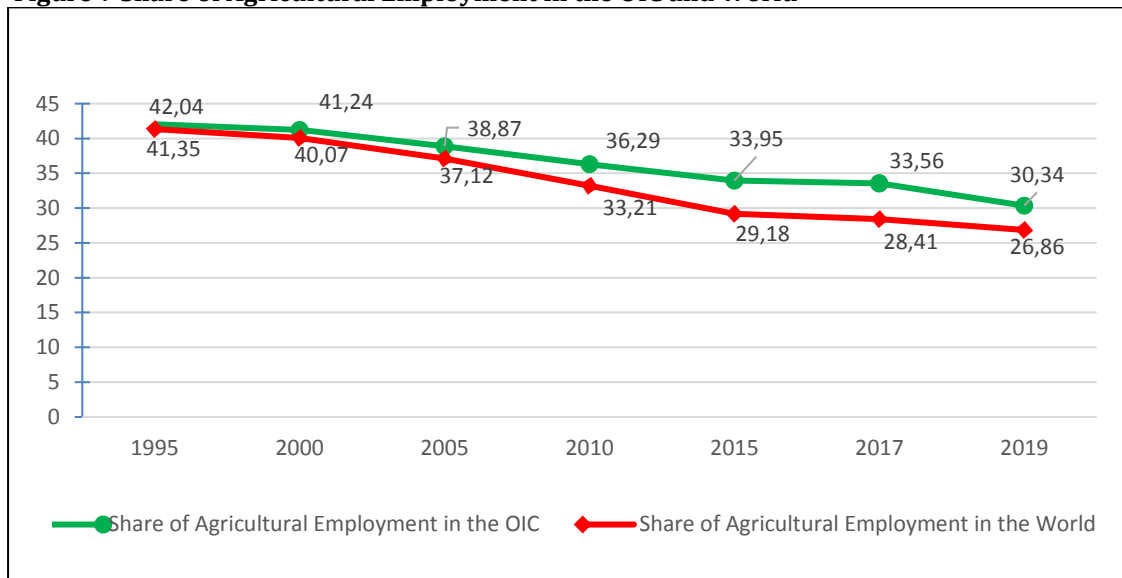
1.4 Agricultural Employment

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 24 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 2019, the proportion of agricultural employment is realized as 30.34 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 and 11

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.

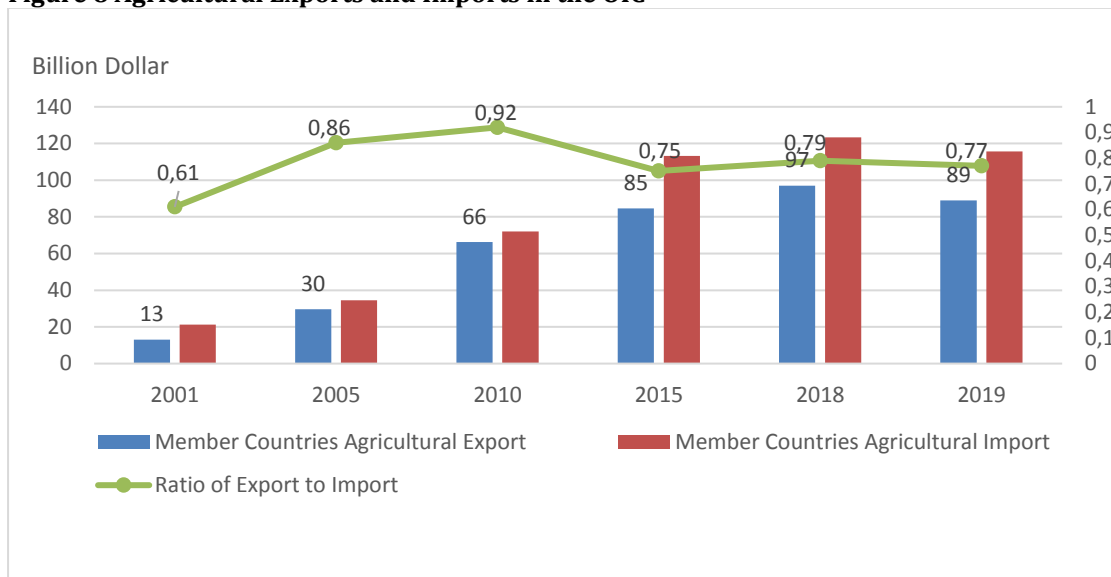
1.5 Agricultural Trade

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 2019. Total agricultural trade in the OIC member countries grew by more than 4 times during this period and reached 205 billion US Dollars in 2019 (Figure 8). In 2019, total agricultural imports of OIC member countries reached 116 billion US Dollars, from 21 billion US Dollars in 2001. Correspondingly, total agricultural exports of OIC member countries were 89 billion US Dollars in 2019 compared to 13 billion US Dollars in 2001.

Figure 8 Agricultural Exports and Imports in the OIC



Source: Annex 12 and 13

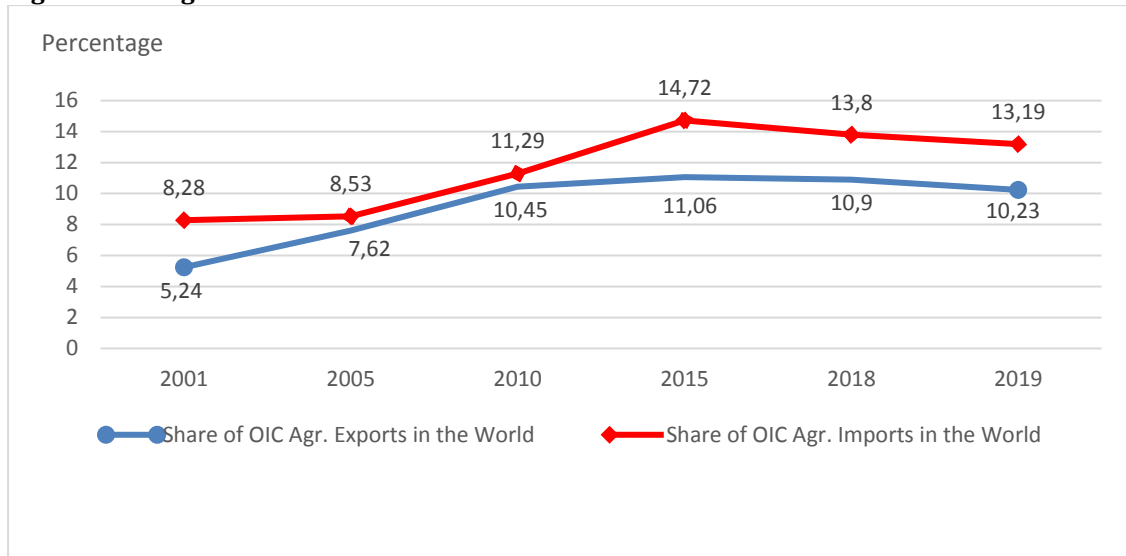
The export/import ratio which is a useful indicator for assessing trade performance is also shown in Figure 8. While the ratio of exports to imports was around 61 percent in 2001, it increased to almost 92 percent in 2010. However, the export/import ratio has shown a declining path around 79 percent in recent years. The poor performance of agricultural exports in 2019 negatively affected the export/import ratio, regressing it to almost back to 2015 level, 77 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 13.19 percent in 2019 from 8.28 percent in 2001. Correspondingly, the contribution of OIC agricultural exports to world total agricultural export reached 5.24 percent. Both agricultural imports and exports have significantly risen in the period of 2001-2015. During the 2010-2019 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 2019, 23.3 billion US Dollars trade deficit occurred in the OIC. Figure 10 also illustrates the agricultural trade balance in the OIC Sub-Regions in 2019. The only group which had a positive trade balance was the Asian Group with 23.1 billion US Dollars. On the other hand, African and Arab Groups have registered

trade deficits of 8.9 and 37.7 billion US Dollars, respectively.

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

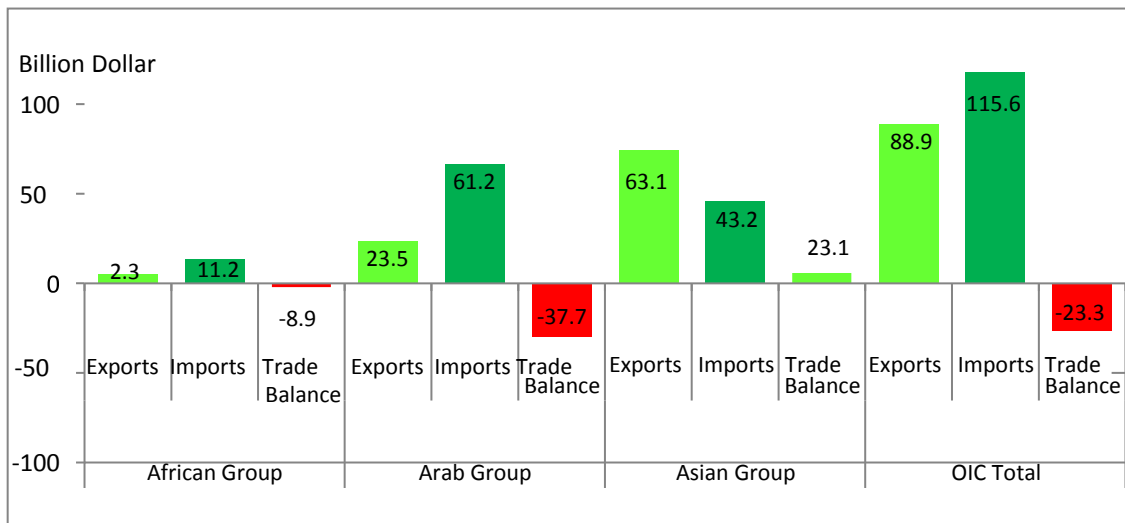


Source: Annex 12 and 13

At the sub-regional level, Asian Group had the highest share in OIC’s agricultural exports with 63.1 percent in 2019. Asian Group was followed by Arab and African Groups with 61.2 percent and 11.2 percent respectively. In terms of agricultural imports, Arab Group accounted for 52.9 percent of the OIC’s total in the same period. It was followed by Asian and African Groups with 37.4 percent and 9.7 percent, respectively (Figure 10).

The Annexes 15 and 16 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, 2019


Source: Annex 12-13

2. Sectoral Indicators

Sectoral indicators provide more specific information on the structure of a sector. In 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 3.2 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 28,6 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.

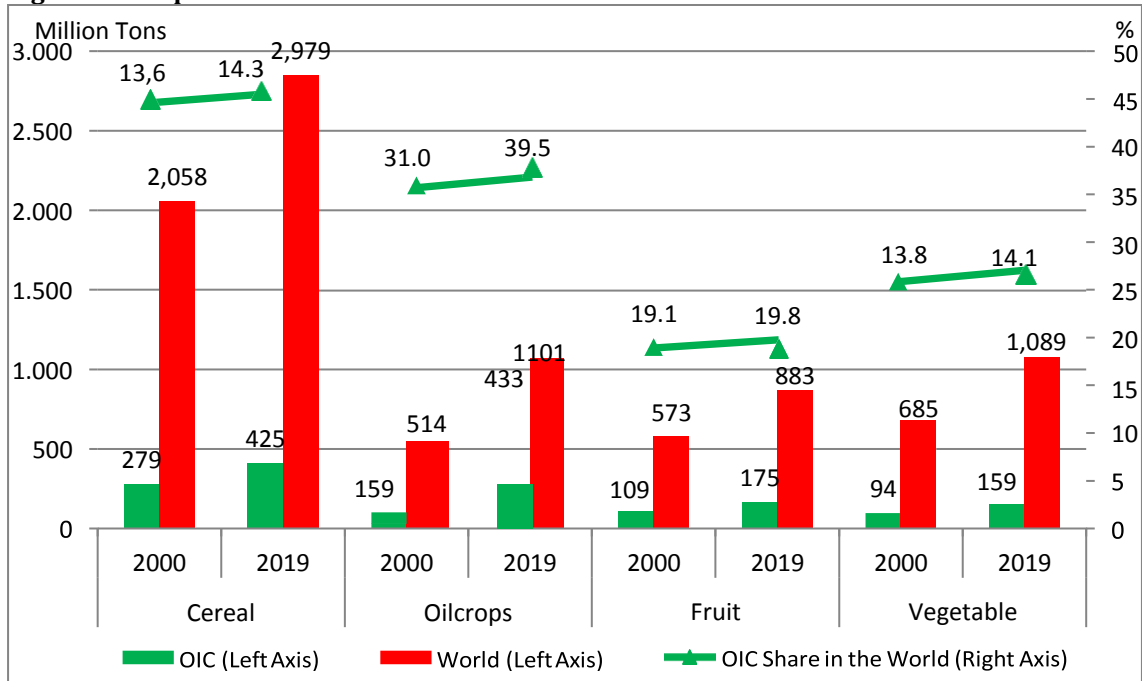
At the individual country level, Kazakhstan with 15.8 percent, Saudi Arabia with 12.8 percent, Nigeria with 5.09 percent, Sudan with 5.02 percent, and Indonesia with 4.59 percent, own significant portion of OIC's agricultural land. Regarding the arable land, the country ranking list changes slightly, 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 2019, OIC member countries contributed 425 million tons to the world cereal production, representing 14.3 percent of the world total cereals production. Even though the cereal production increased by 52,5 percent in the period of 2000-2019, the share of OIC member countries in the world cereal production showed a very slight increase. As of 2019, 433 million tons of oil crops were produced in the OIC, compared to 159 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 31.0 percent to 39.5 percent during the 2000-2019 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

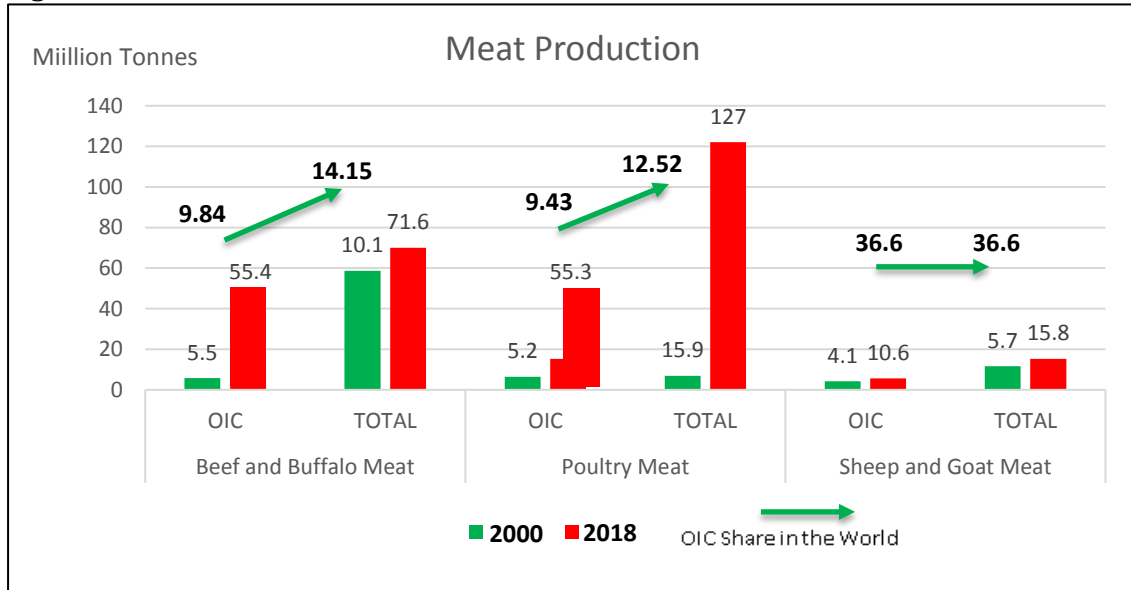


Source: Annex 18-21

In 2019, the share of OIC member countries in the world fruit production amounted to 19.8 percent, compared to 19.1 percent in 2000. The share of OIC member countries in the world total production of vegetables were around 13.8 percent in 2000 and increased to 14.1 percent in 2019.

Figure 12 illustrates the developments in meat production in the OIC member countries and its share in the world. In 2018, 10.1 million tons of beef and buffalo meat was produced in the OIC as compared to 5.5 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.⁴ 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 14.15 percent in 2018.

⁴ SESRIC, 2015

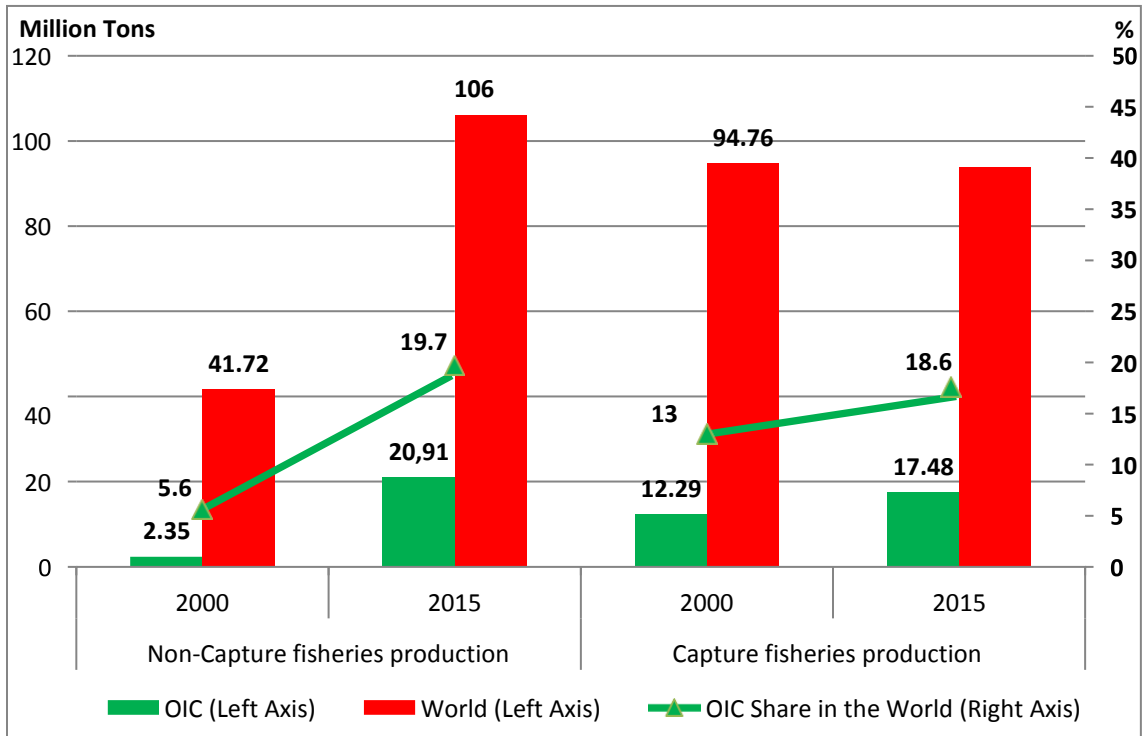
Figure 12 Meat Productions in the OIC and Shares in the World


Source: Annex 22-24

Similarly, a dramatic surge is observed in the poultry meat production during the same period. While it was 5.2 million tons in the beginning of the century, it almost tripled and reached 15.9 million tons in 2018. 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 12.52 percent in 2018, from 9.43 in 2000. Finally, sheep and goat meat production of OIC member countries continued to grow and exceeded 5.7 million tons in 2018. Compared to beef and buffalo meat and poultry meat, the share of sheep and goat meat production of OIC member countries in the world stayed the same over time, with a 36 percent share.

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 30.6 percent in 2000 to 53.1 percent in 2015 while the one in OIC is increased from 16 percent in 2000 to 53.1 percent in 2015.

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.

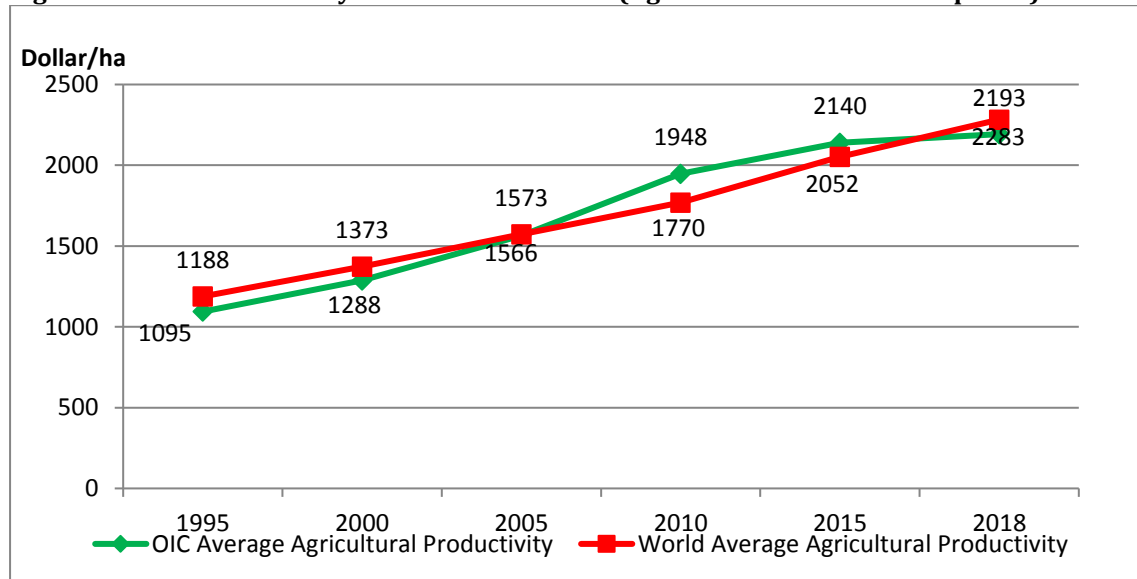
Since land and labor are the most important inputs which are used throughout the production process, below we present two aggregate productive to denote sector input use efficiency, namely, productivities of land and labor measured as the ratios of total agricultural value added to total agricultural 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 1995-2018 using the real agricultural GDP at 2010 prices.

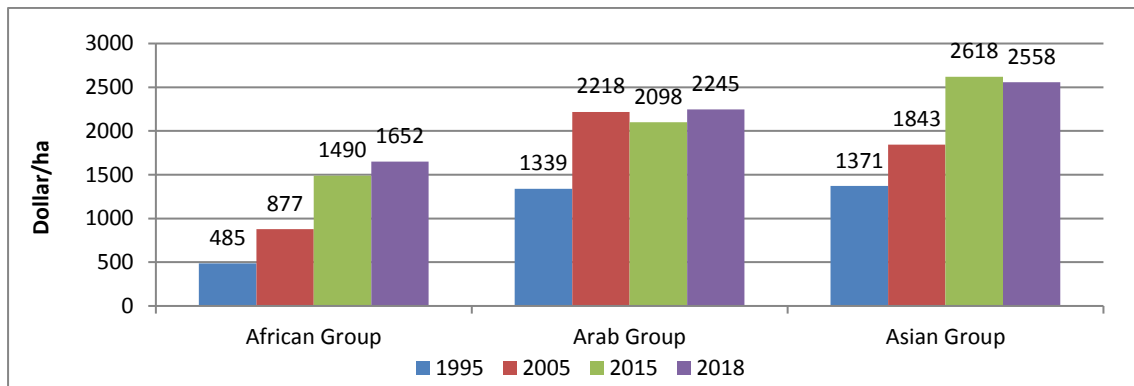
Figure 14 Land Productivity in the OIC and World (Agr. GDP at 2010 constant prices)



Source: Annex 28

In 2018, average agricultural land productivity of OIC member countries reached to 2,193 US dollars/ha, from 1188 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 1995-2018, agricultural land productivity of the world increased by 108.5 percent, compared to only 84.6 percent in the OIC member countries. The significant rates of growth in both OIC and the World realized between the period 1995 and 2018, 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 2010 constant prices)

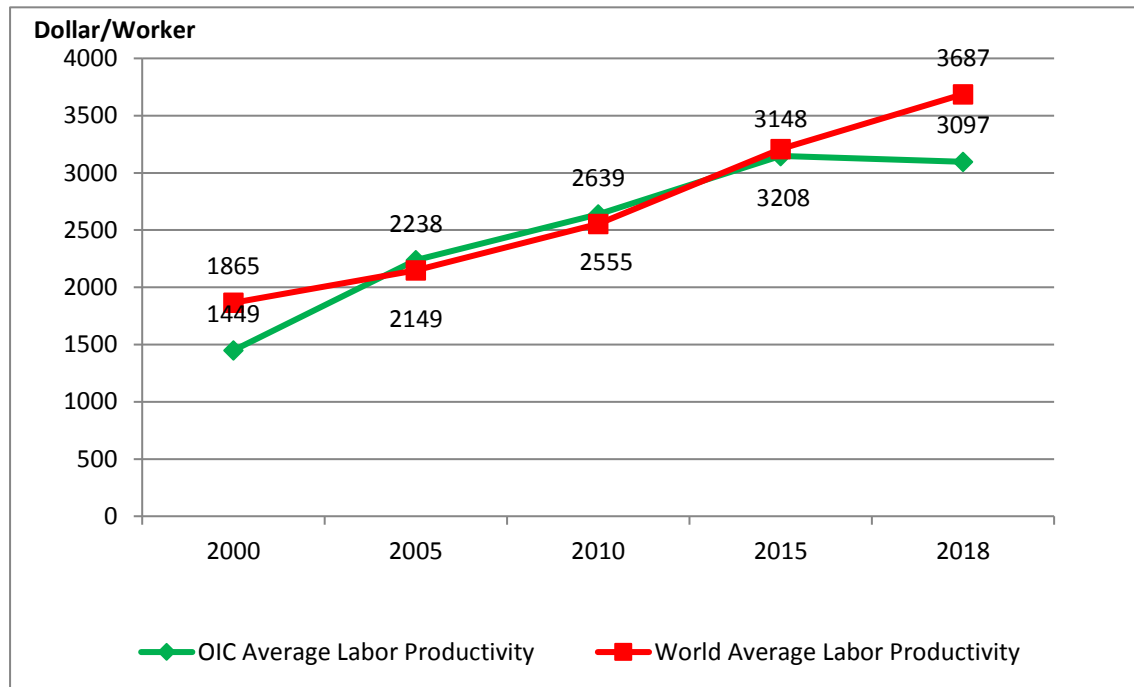


Source: Annex 28

At the sub-regional level, Asian Group had the highest level of agricultural land productivity in the OIC with 2,558 US Dollars per hectare in 2018 (Figure 15). The Asian Group was followed by Arab Group with 2,245 US Dollars per hectare in 2018. 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 its 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 1995-2018. On the other hand, although African Group had the lowest performance with respect to agricultural land productivity over the years; it accomplished the highest growth in the same period, with more than 3 times increase in the level of agricultural land productivity (Figure 15).

2.3.2 Labor Productivity

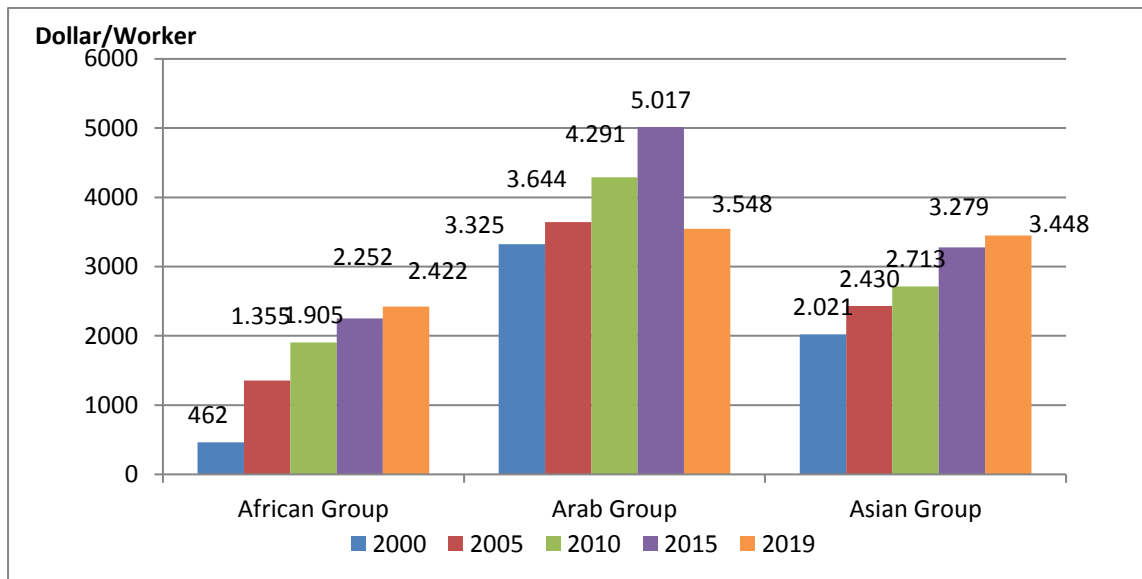
Agricultural labor productivity is measured by the ratio of total agricultural value added to the number of agricultural employments. Hence, it tells the average performance of total labor employed in agriculture sector. Figure 16 shows the agricultural labor productivity in the OIC and in the World between 2000 and 2018 using real agricultural GDP at 2010 prices as the measure of agricultural value added.

Figure 16 Labor Productivity in the OIC and World (Agr. GDP at 2010 constant prices)


Source: Annex 29

Labor productivity is started to be below the world average in the OIC in 2000. In 2018, average agricultural labor productivity of OIC member countries reached 3,097 US dollars/person, compared to 1,449 US dollars/person in 2000.

Figure 17 Labor Productivity in the OIC by Sub-Regions (Agr. GDP at 2010 constant prices)



Source: FAOSTAT

Figure 17 reveals that Arab Group has the highest labor productivity among the three regions. As of 2019, average agricultural labor productivity of Arab Group increased to 5,017 US dollars/person in 2015, from 3,325 US dollars/person at the beginning of 2000s. Looking at the individual countries in the Arab Group, United Arab Emirates, Saudi Arabia, Algeria, Kuwait, Oman and registered the high-level labor productivity. Although the levels of labor productivity are high in the OIC, it must be recognized that many countries in the region have a serious obstacle for agricultural development due to limited water resources and unfavorable climatic conditions. The higher levels of labor productivity are probably due to a host of factors including high levels of mechanization and use of fertilizer and pesticides. It may be noted that the levels of labor productivity in the Kuwait, United Arab Emirates and Saudi Arabia are comparable to those in high income countries.⁵

Although being very similar to Asian Group, the level of labor productivity in the African Group was the lowest in the OIC with 2,422 US dollars/person in 2019. Some African Group member countries such as, Niger, Guinea and Guinea-Bissau had the lowest levels of labor productivity among the OIC member countries in this year.

2.3.3 Crop Yields

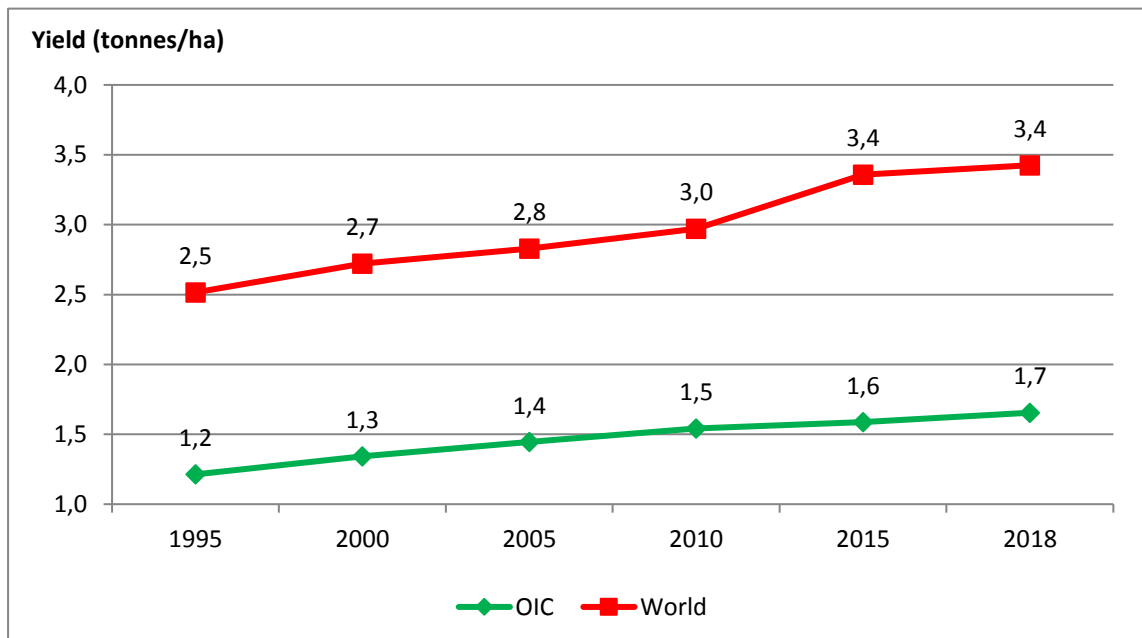
Another common indicator for analyzing agricultural productivity is crop yields. Even crop yields can be calculated for each agricultural product, it should suffice to present improvements in the most common, important and strategic crops. Therefore, wheat, maize and cotton seed which play crucial roles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

⁵ IDB, 2009

Figure 18 shows the yield of wheat, which is one of the most common cultivated products in the OIC. In 2018, average wheat yield of OIC member countries reached 1.7 tons/hectare, from 1.2 tons/hectare in 1995. Wheat yield increased in general both in the OIC and in the world during the last two decades. As of 2018, World average wheat yield was 50 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.

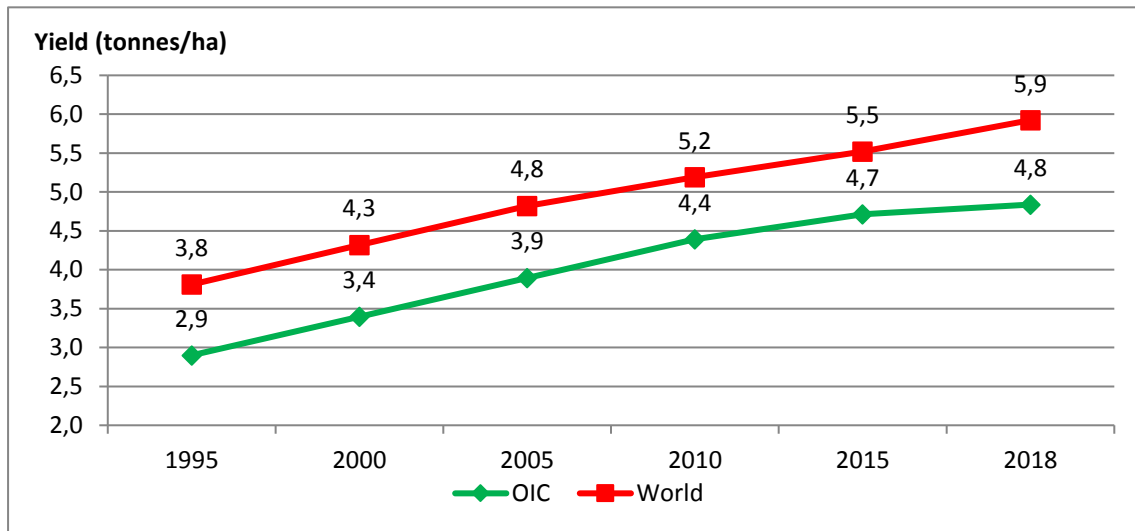
Figure 18 Wheat Yields in the OIC and the World



Source: Annex 30

Figure 19 shows the maize yields in the OIC and the World. In 2018, average maize yield of OIC member countries reached 4.8 tons/hectare, from 2.9 tons/hectare in 1995. The increase in maize yield in the OIC member countries between 1995 and 2018 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 2018, world average wheat yield was 23 percent higher than that of OIC member countries.

Figure 19 Maize Yields in the OIC and the World

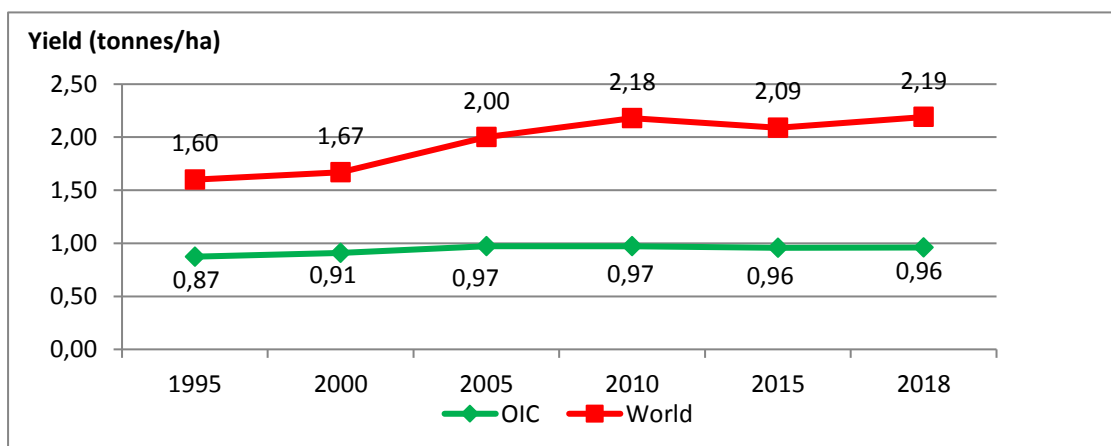


Source: Annex 31

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 1995-2018. 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 0.96 tons/hectare in 2018. Over the period of 1995-2018, the world average cotton yield was always higher than the OIC figures. As of 2018, world average cotton yield was 128 percent higher than OIC's.

Figure 20 Cotton Yields in the OIC and the World



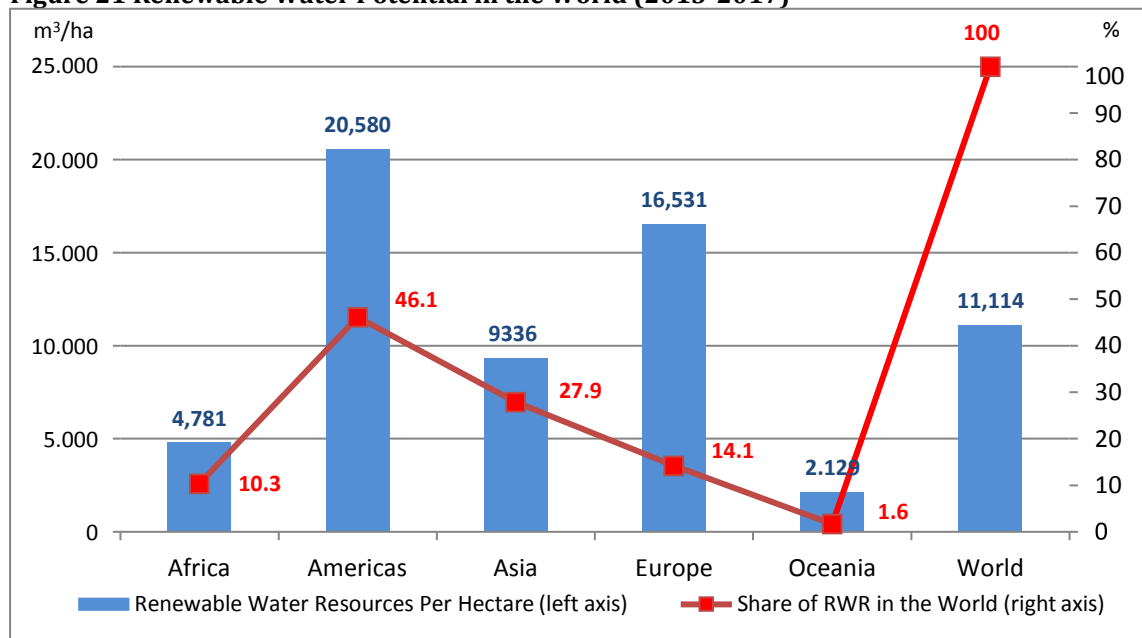
Source: Annex 32

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, 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 the World (2013-2017)



Source: FAOSTAT

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 2013-2017. The continental distribution of total

⁶ Nayak and Bhattacharjee, 2005

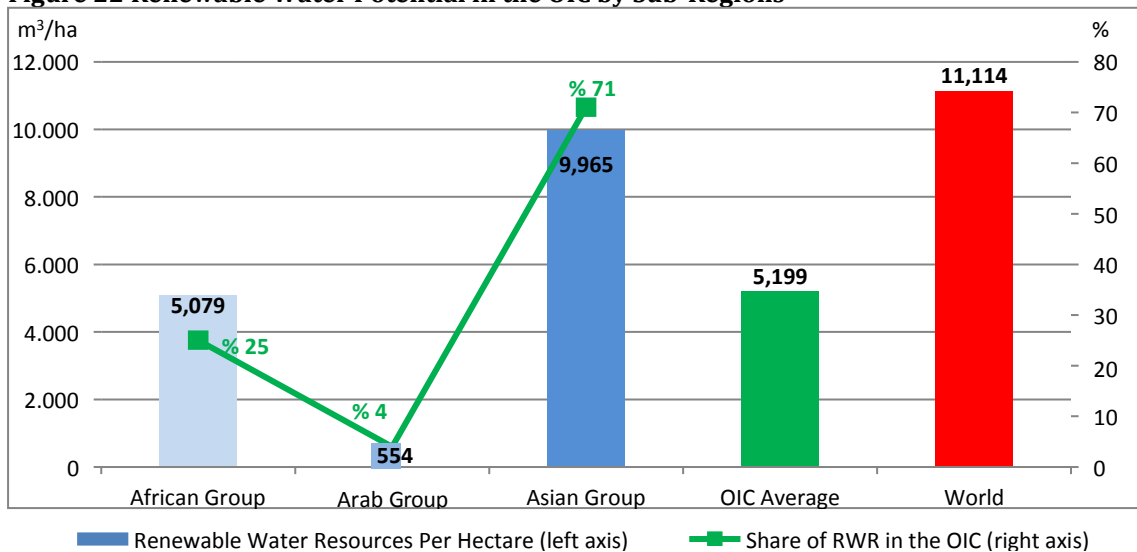
⁷ Nellesmann et. al, 2009

⁸ UNEP, 2002

⁹ SESRIC, 2014

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.

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



Source: Calculated by using AQUASTAT and FAOSTAT

OIC member countries have 7,261 km³/year of renewable water resources for the period 2013-2017 that accounts for 13.3 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 22. 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 9,965 m³/ha renewable water per hectare of agricultural land, Arab Group owns 4 percent of renewable water resources with 554 m³/ha renewable water per hectare of agricultural land.

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.

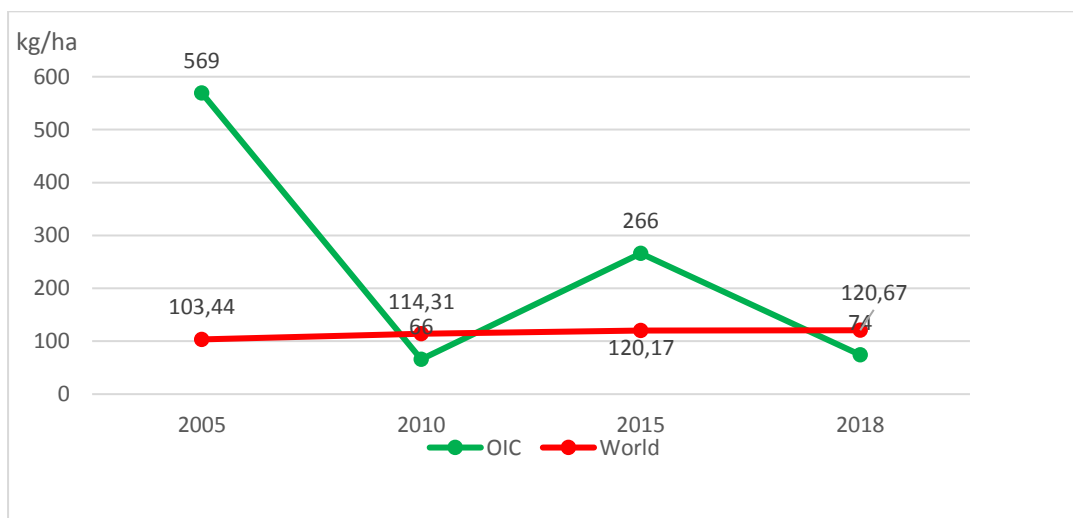
When discussing irrigation, it is not sufficient to know only the water potential. Additionally, we need to look at the utilization of this potential in agriculture. Large part of the OIC member countries are located in arid and semi-arid regions geographically. Hence, widespread and modern irrigation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

The average use of fertilizer per hectare in the OIC member countries sharply dropped from 569 kilograms in 2005 to 74 kilograms in 2018. The world average fertilizer use stayed at almost the same level and reached to 120.67 kilograms from 103.44 kilograms in 2005. As of 2018, 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

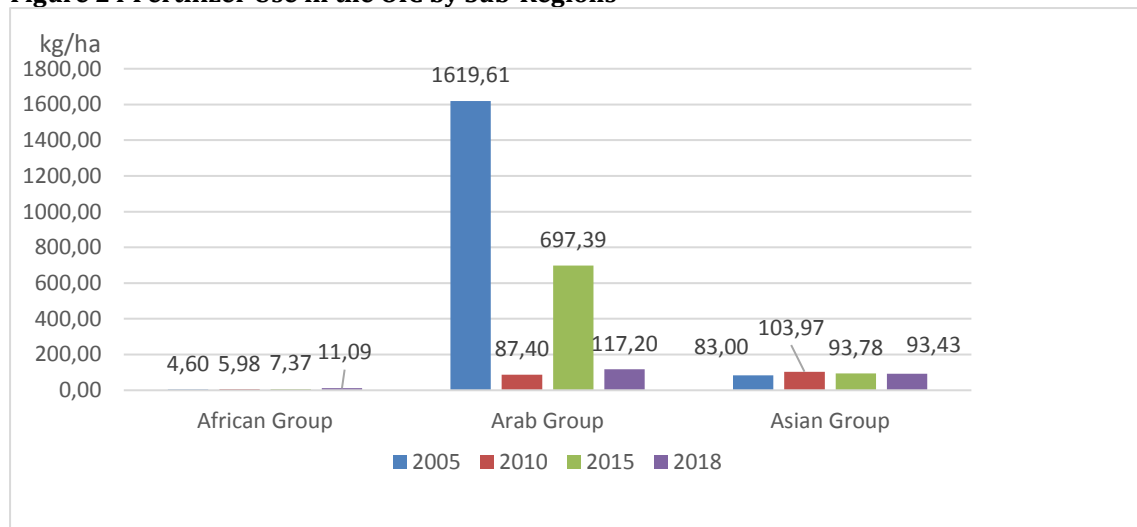


¹⁰ SESRIC, 2014

Source: FAOSTAT

At the sub-regional level, the use of fertilizers in the African Group Countries was very low with 11.1 kg/hectare in 2018. On the other hand, the use of fertilizer in Arab Group Countries and Asian Group Countries are 117.2 kg/hectare and 93.4 kg/hectare, respectively (Figure 24).

Figure 24 Fertilizer Use in the OIC by Sub-Regions



Source: FAOSTAT

2.6 Mechanization

The ratio of number of tractors per 1,000 hectares of arable land in the OIC member countries declined to 6.9 in 2008 from 9.8 in 2002. This reduction shows that 1,000 hectares of arable land needed to be harvested by 6.9 tractors in 2008, instead of 9.8 in 2002. Even though the number of tractors used increased in the OIC member countries between 2002 and 2008, increase in the arable land area was higher. Hence, this situation leads to a decrease in the ratio of number of tractors used in arable land in the OIC.

Developed countries and other developing countries also experienced a similar reduction in this ratio. As of 2008, 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

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 September 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.

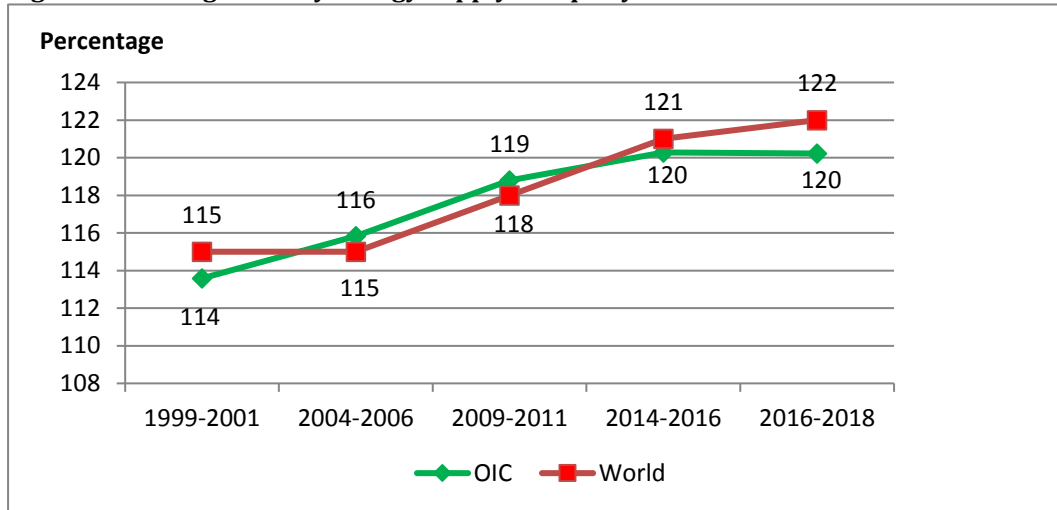
3.1 Availability

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.¹² 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.

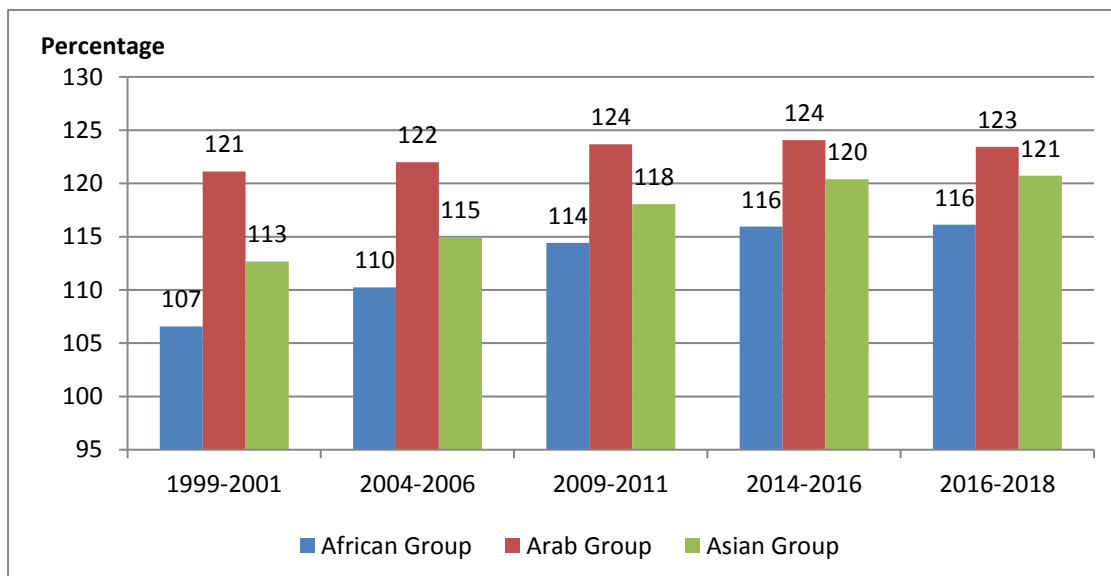
Dietary Energy Supply Adequacy: Figure 25 illustrates the developments in average dietary energy supply adequacy in the OIC member countries and the world. It is calculated as three-year averages from 1990-92 to 2016-18 to provide an index of adequacy of the food supply in terms of calories. As it is 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 FAO, 2008

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


Source: Annex 35

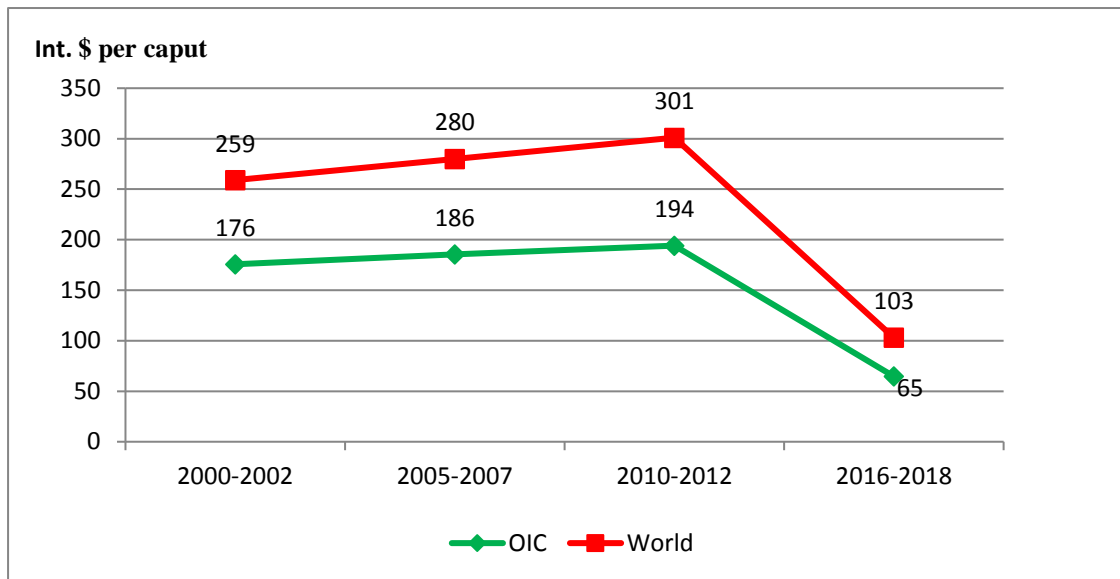
At the sub-regional level, average dietary energy supply adequacy is the highest in the Arab Group with 123 percent in 2016-2018. Considering the adequacy rate of developed countries which is 136 percent, Arab Group has moderately lower dietary energy supply adequacy than developed countries. Arab Group is followed by Asian and African Group with 121 and 116 percent of average dietary energy supply adequacy; respectively. 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 35

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 2004-06 international dollar terms, per caput.

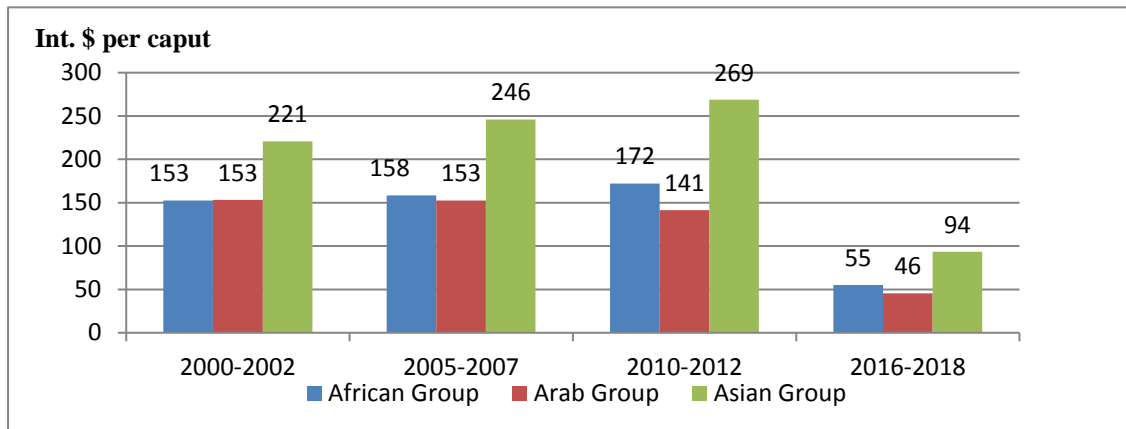
Figure 27 Average Value of Food Production in the OIC and the World



Source: Annex 36

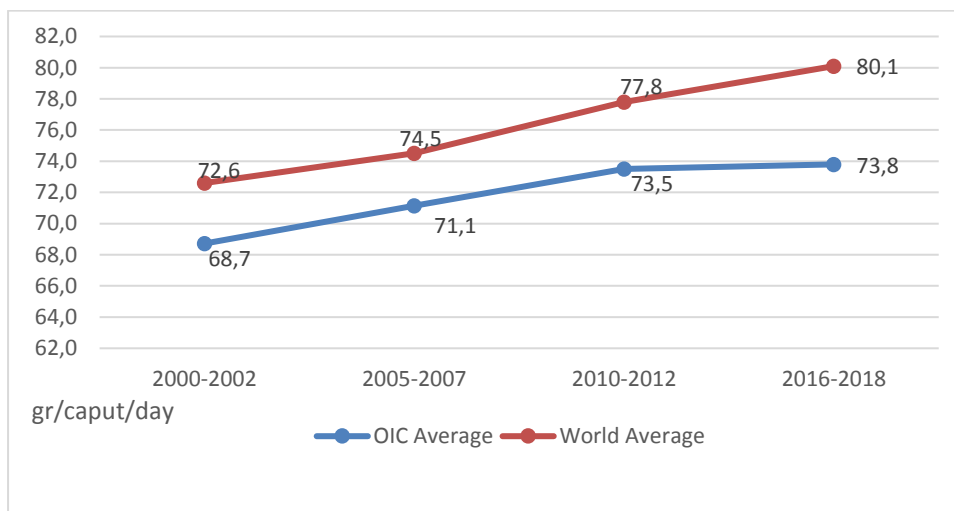
Figure 27 shows the average value of food production from 2000-2002 to 2016-2018. As of 2016-2018, average value of food production in the OIC member countries decreased to 65 dollars per capita, from 176 dollars in 2000-2002. Between these periods, it has decreased by 63 percent and stayed lower than 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 36

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

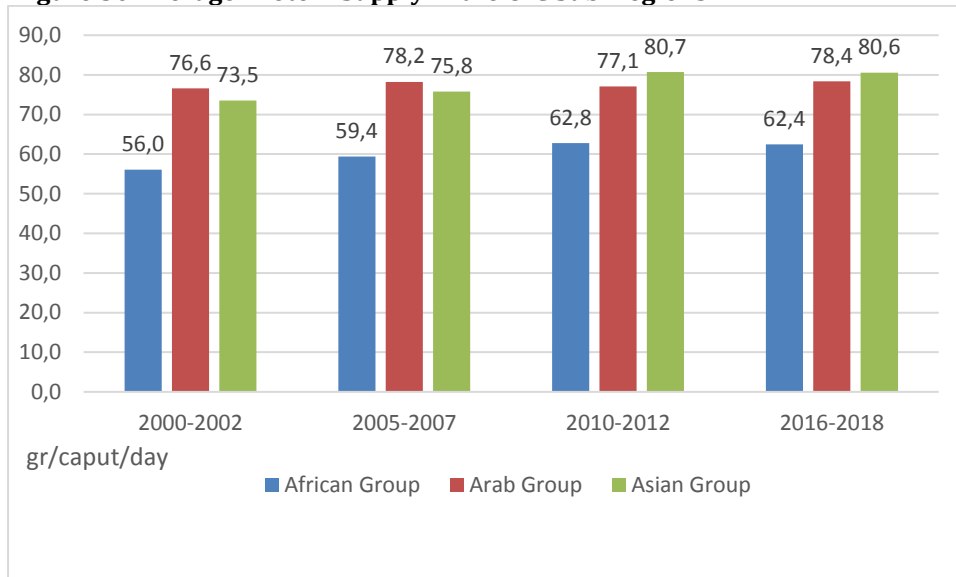
Source: Annex 37

Figure 29 illustrates that average protein supply per caput in a day in the OIC member countries reached to 73.8 gr/caput in 2016-2018; 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 gr in 2016-2018. Asian Group was followed by Arab Group and African Group with 78,4 gr and 62,4 gr respectively. Protein supply is sufficient in very few countries such as Kuwait, Maldives, United Arab Emirates and

Turkey. 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

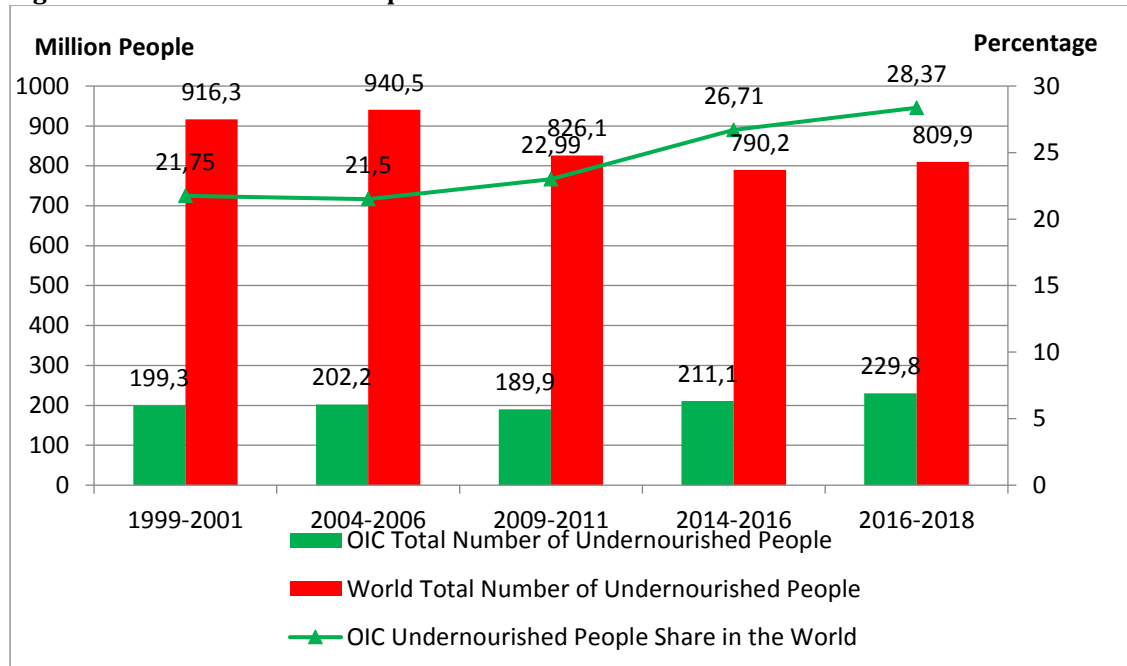


Source: Annex 37

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.

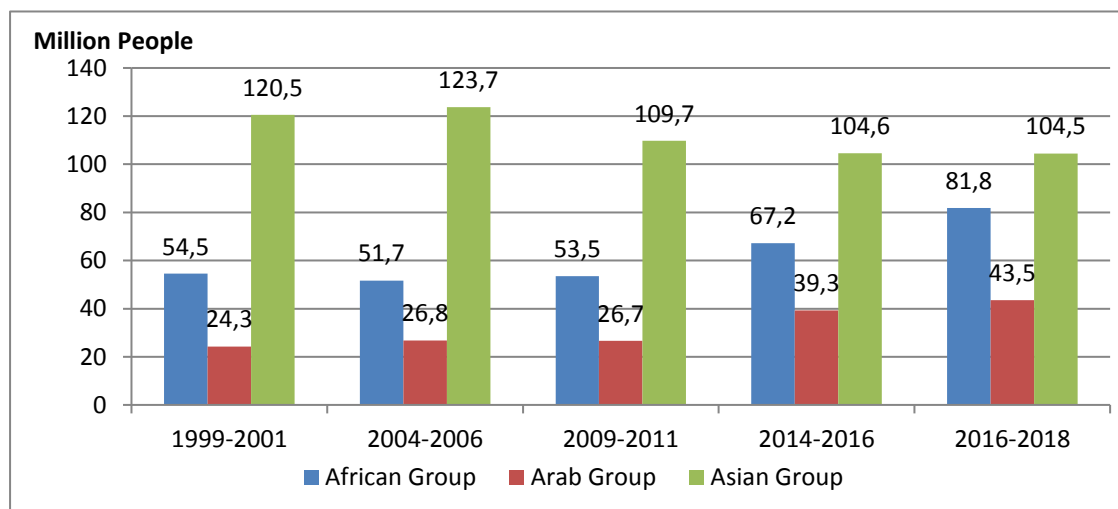
Figure 31 displays that as of 2016-2018, 229.8 million people are expected to be undernourished in the OIC member countries which accounts for 28.37 percent of undernourished people in the World. In the last 20 years, while the number of undernourished people in the World has fallen gradually, it remained 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 28.37 percent 2016-2018. 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.¹³

¹³ SESRIC, 2015

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

Source: Annex 38

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 as of 2016-2018, 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.

Figure 32 Undernourished People in the OIC by Sub-Regions

Source: Annex 38

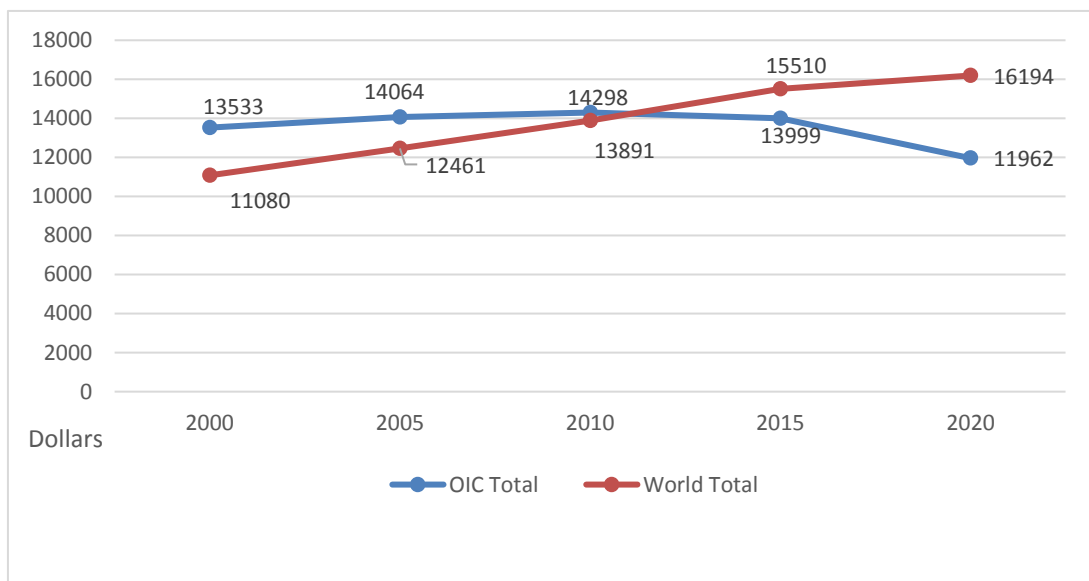
3.2 Access

World Health Organization defines the food access as having sufficient resources to obtain appropriate foods for a nutritious diet.¹⁴ 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.¹⁵

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 39

GDP Per Capita: Figure 33 demonstrates the developments in GDP per capita valued at constant 2011 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

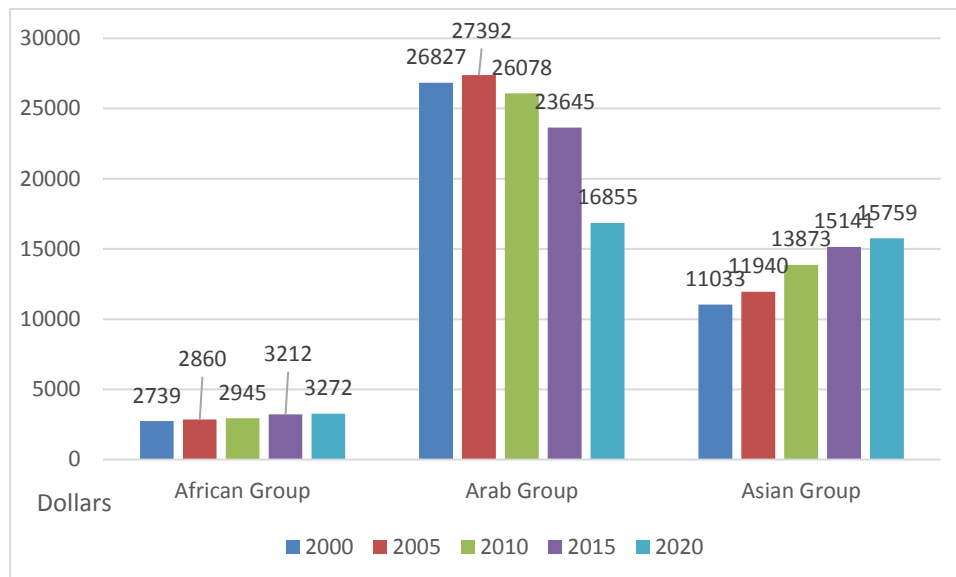
¹⁴ WHO, 2015

¹⁵ 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).

Figure 34 GDP Per Capita in the OIC Sub-Regions



Source: Annex 39

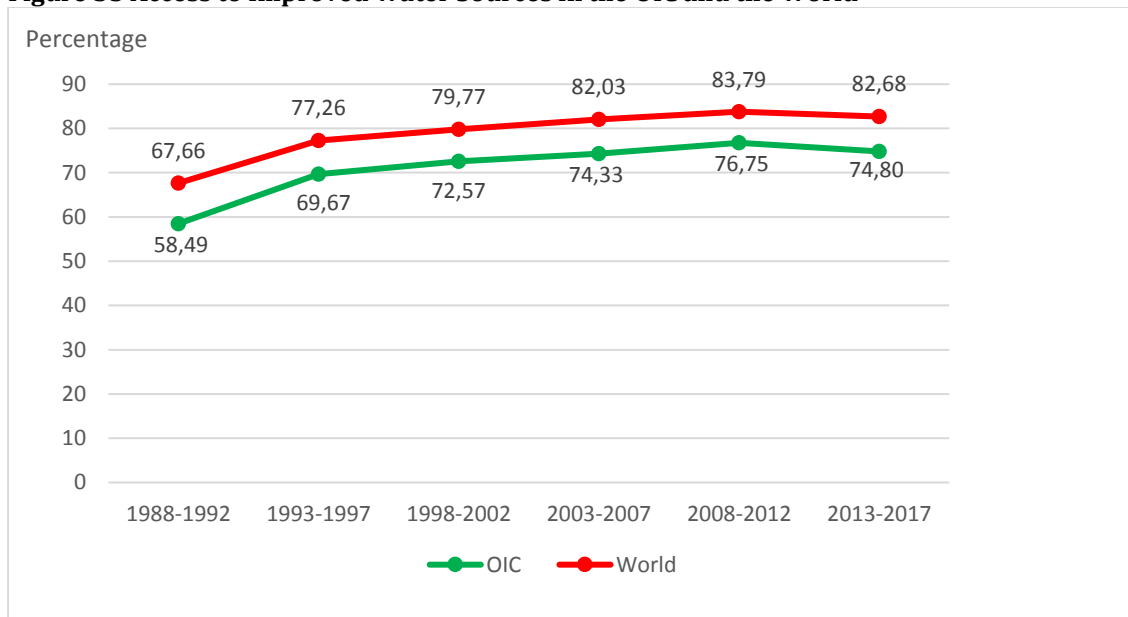
3.3 Utilization

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.¹⁶ 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.

¹⁶ FAO, 2006

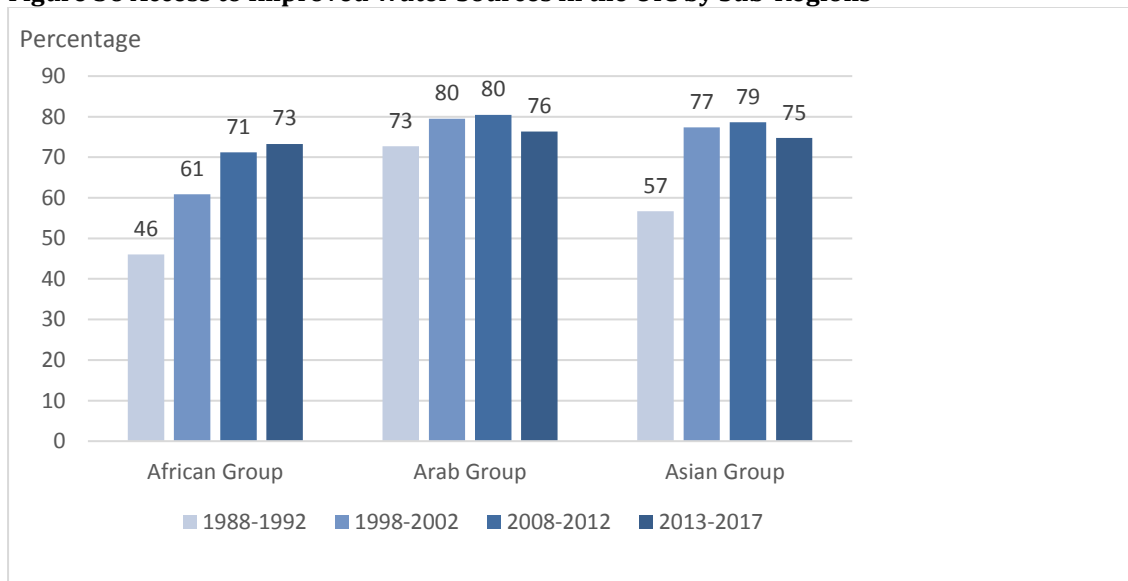
Figure 35 Access to Improved Water Sources in the OIC and the World



Source: Annex 40

Figure 35 illustrates the percentage of population having access to improved drinking water sources in the OIC and the World. As of 2015, 74.80 percent of OIC population has access to improved drinking water sources compared to 58.49 percent in 1990. 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 40

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 1990-2015 (Figure 36). In the period of 1990-2000, African Group countries were quite below the World average. In 2015, the percentage of population having access to improved drinking water sources has reached 76 percent in the Arab Group 75 percent in the Asian Group, and 73 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 improved drinking water sources, it is still a concern in the OIC Member Countries.

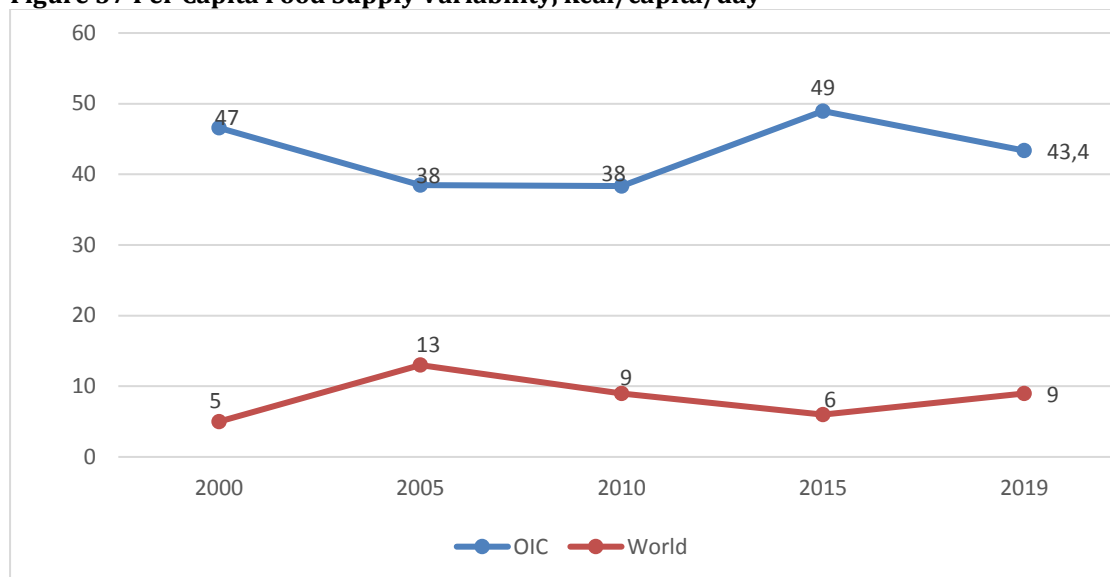
3.4 Stability

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.

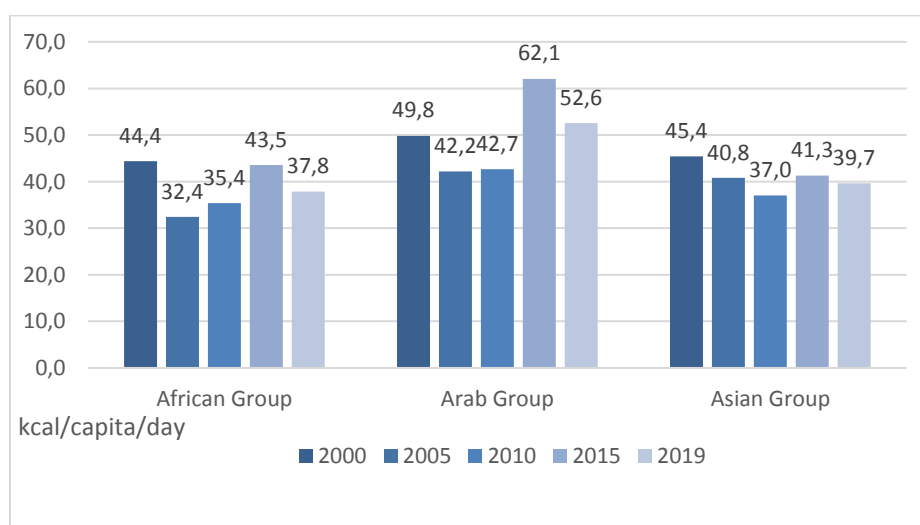
Figure 37 Per Capita Food Supply Variability, kcal/capita/day



Source: Annex 41

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. As opposed to the decreasing trend in the World average after 2005, OIC level food supply variability has an increasing trend since the year 2010.

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



Source: Annex 41

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 2019, the food supply variability has reached 52 in the Arab Group and it is followed by 40 and 38 percent values for Asian and African Groups, respectively.

4. Transforming Food Systems After COVID-19: Post COVID-19 Effects on Agriculture in OIC

The effects of COVID-19 were strongly felt in 2021. 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. The sustainability of food systems (SFS) in member states will play a major role and provide a solid platform to reach this goal.

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 moving¹⁷.

¹⁷ 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. 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.

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)¹⁸.

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)¹⁹. 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 attributes²⁰ (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.

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 biodiversity²¹.

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.⁸ 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 transformation²².

¹⁸ FAO-SOFI, 2021

¹⁹ IPCC 2020

²⁰ Fans et al. (2021) <https://www.annualreviews.org/doi/10.1146/annurev-resource-101520-081337>

²¹ Dobson et al., "Ecology and Economics for Pandemic Prevention, (2020)." *Science* 369, no. 6502: 379–381.

²² 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>

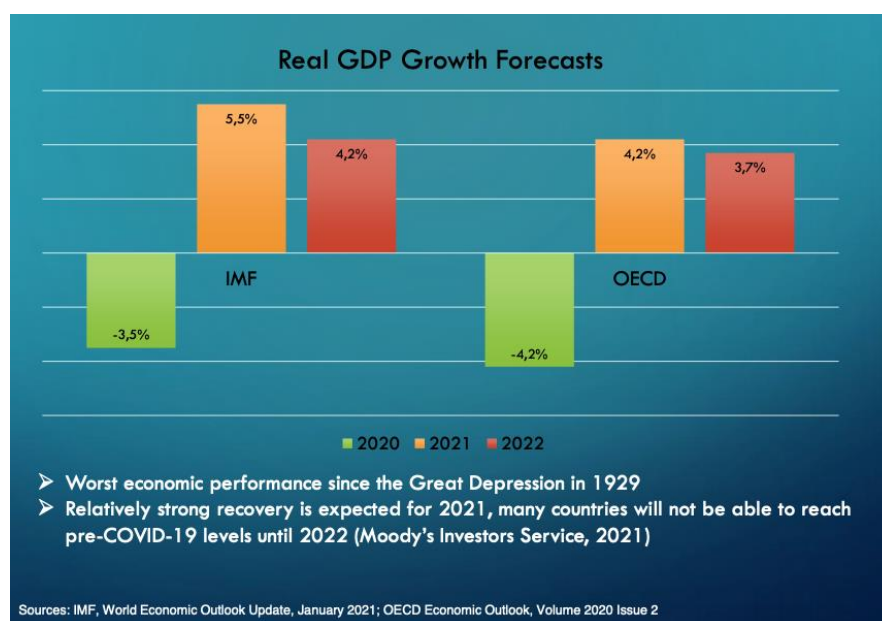
4.2. Impacts of post-COVID-19 on Food Systems

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) possibly forecasting a pathway to transform food systems for the long term in the post-COVID 19 era²³.

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)²⁴.

Figure 40 Real GDP Growth Forecasts



By the end of 2020, 95 million additional people -mostly in Africa south of the Sahara- were estimated to be living in extreme poverty²⁵. 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 levels²⁶. 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 hotspots²⁷ (Table 9).

²³ HLPE 2020. <https://www.fao.org/3/ca9731en/ca9731en.pdf>

²⁴ OECD 2021. <https://www.oecd.org/economic-outlook/may-2021/>

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 countries²⁸.

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 percent 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 people²⁹.

²⁵ Wourterse F., S. Murphy, and J. Porciello, “Social Protection to Combat Hunger,” *Nature Food* 1 (2020): 517–518.

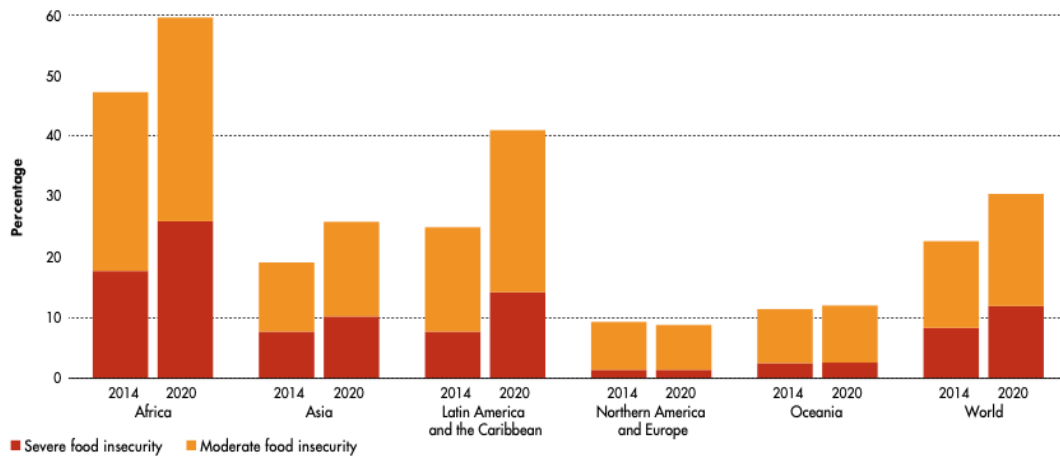
²⁶ Laborde Debutquet D., W. Martin, and R. Vos, “Impacts of COVID-19 on Global Poverty, Food Security and Diets,” IFPRI Discussion Paper 1993 (IFPRI, Washington, DC, 2020).

²⁷ IFPRI 2020. <https://ebrary.ifpri.org/utils/getfile/collection/p15738coll2/id/133762/filename/133971.pdf>

²⁸ Kalantaryan S. and S. McMahon. (2020) *Covid-19 and Remittances in Africa*, JRC Technical Report (Luxembourg: European Union, 2020).

²⁹ 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 pandemic³⁰.

³⁰ 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 organizations^{31, 32}.

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, and animal-sourced foods, toward cheaper staple foods.²³ 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 insecurity¹⁸.

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 2020³⁵.

Although, the net effects of the pandemic are still to be calculated; the efforts not only to ensure the food security but also to transform the food systems under post-COVID-19 in OIC member states are becoming more and more difficult.

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)¹⁸. 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 restrictions³⁶.

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 activities³⁷.

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.

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.

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>

³⁵ Headey et al. (2020). [https://doi.org/10.1016/S0140-6736\(20\)31647-0](https://doi.org/10.1016/S0140-6736(20)31647-0)

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 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) period³⁸.

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 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

³⁶ Swinnen j. and J. McDermott, "Covid-19 and Global Food Security," *EuroChoices* 19, no. 3 (2020): 26–33.

³⁷ Madgavkar et al. (2020). <https://www.mckinsey.com/featured-insights/future-of-work/covid-19-and-gender-equality-counteracting-the-regressive-effects>

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 resilient³⁹.

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.

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 starvation²⁷.

- (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 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 ongoing 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.

A purposeful transformation of the food systems, globally and locally is required. 2020 and 2021 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.

³⁸ COMCEC (2021). <https://www.comcec.org/wp-content/uploads/2021/10/1.pdf>

³⁹ SESRIC (2021).

<https://sesrtcic->

[my.sharepoint.com/:x/g/personal/akaraman_sesric_org1/ESIj0bjFvONHqo3BU6JWOzgbou7Iq6Uqej4Yc0UzVkiq4A?rttime=wHUnNNqk2Ug](https://sesrtcic-my.sharepoint.com/:x/g/personal/akaraman_sesric_org1/ESIj0bjFvONHqo3BU6JWOzgbou7Iq6Uqej4Yc0UzVkiq4A?rttime=wHUnNNqk2Ug)

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 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,
- 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, Turkey 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 1994-2020.

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 measures⁴⁰. 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 World in different terms at this Publication could serve as a leverage for both food and nutrition security.

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.

⁴⁰ FAOSTAT (2021b) <http://www.fao.org/faostat/en/#data/FS>

References

- Alpas, H. (2021). <https://www.comcec.org/agriculture/presentations-of-the-17th-meeting-of-the-comcec-agriculture-working-group/>
- COMCEC (2021). <https://www.comcec.org/wp-content/uploads/2021/10/1.pdf>
- COMCEC, *COMCEC Strategy*, 2012.
- COMCEC Agriculture Outlook, 2019*
- http://www.sbb.gov.tr/wp-content/uploads/2019/10/Agriculture_Outlook_2019_October.pdf
- Dobson et al., "Ecology and Economics for Pandemic Prevention, (2020)." *Science* 369, no. 6502: 379–381.
- Fan s et. al. (2021) <https://www.annualreviews.org/doi/10.1146/annurev-resource-101520-081337>
- FAO, *Food Security Concepts and Frameworks*, 2008.
- FAO, *Policy Brief on Food Security*, Issue 2, 2006. <http://www.fao.org/forestry/13128-0e6f36f27e0091055bec28ebe830f46b3.pdf>
- FAO, *Food Security Indicators*, 2015. <http://www.fao.org/economic/ess/ess-fs/ess-fadata/en/#.VeKvt03ot3c>
- FAO 2019, The State of Food Security and Nutrition in the World* <http://www.fao.org/state-of-food-security-nutrition>
- FAO, 2019 Global Report on Food Crises.* http://www.fsinplatform.org/sites/default/files/resources/files/GRFC_2019-Full_Report.pdf
- FAO Food Outlook Covid 2020*, <http://www.fao.org/3/ca9509en/ca9509en.pdf>
- FAO-SOFI 2021, The State of Food Security and Nutrition in the World*, <http://www.fao.org/publications/sofi/2021/en/>
- FAOSTAT (2021a)*, <https://doi.org/10.4060/cb4477en-fig49>
- FAOSTAT (2021b)* <http://www.fao.org/faostat/en/#data/FS>
- FAO-WFP 2020*, <https://www.wfp.org/publications/fao-wfp-early-warning-analysis-acute-food-insecurity-hotspots>
- Glauber et al., (2020). "COVID-19: Trade Restrictions Are Worst Possible Response to Safeguard Food Security," *IFPRI COVID-19 Blog*, IFPRI, March 27, 2020
- Headey et al. (2020). [https://doi.org/10.1016/S0140-6736\(20\)31647-0](https://doi.org/10.1016/S0140-6736(20)31647-0)
- HLPE 2020. <https://www.fao.org/3/ca9731en/ca9731en.pdf>

IFPRI 2020.

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

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

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

IPCC 2020, <https://www.ipcc.ch>

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

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

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

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

Nayak, P. and Bhattacharjee, P.R., *Agricultural Growth and Price Fluctuation Luctuations: A Case Study of Production and Prices of Potato in Tripura*, General Economics and Teaching, EconWPA, 2005.

Nellemann, C., MacDevette, M., Manders, T., Eickhout, B., Svihus, B., & Prins, A. G., *The enviromental food crisis*, 2009. http://www.grida.no/files/publications/FoodCrisis_lores.pdf

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

IDB, *Fostering Intra-OIC FDI in the Agriculture Sector*, Areef Suleman Isma'eel Ibrahim Na'iya, OCCASIONAL PAPER No. 14, May 2009.

Schmidhuber, J. Pound & B. Qiao. 2020. *COVID-19: Channels of transmission to food and agriculture*. Rome, FAO. <https://doi.org/10.4060/ca8430en>

SESRIC, *Agriculture and Food Security in OIC Member Countries: Opportunities for Cooperation*, 2016. <https://www.sesric.org/files/article/537.pdf>

SESRIC, 2014, *Agriculture and Food Security in OIC Member Countries: Opportunities for Cooperation* <https://www.sesric.org/files/article/483.pdf>

SESRIC, *OIC Economic Outlook*, 2015 <https://www.sesric.org/files/article/517.pdf>

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

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.

UNEP (United Nations Environment Programme), *Global Environment Outlook (GEO-3), State of The Environment And Policy Retrospective: 1972–2002, 2002.*
http://www.unep.org/geo/GEO3/english/pdfs/chapter2-5_Freshwater.pdf

WHO (World Health Organization), *Food Security*, 2015.

WorldBank, *Food Security and COVID 19*,
<https://www.worldbank.org/en/topic/agriculture/brief/food-security-and-covid-19>

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

<http://www.comcec.org/en/wp-content/uploads/2020/07/1-Presentation-Maximo-Torero-COMCEC-COVID-19-June-30.pdf>

http://www.comcec.org/en/wp-content/uploads/2020/07/2-A-SESRIC_COVID19-Impacts-on-Agriculture-and-Food-Security-in-OIC.pdf

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

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

Annexes

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

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

Annex 2: Value Added, Agriculture, Forestry and Fishing in the OIC Countries Current Prices

Country Name	2000 [YR2000]	2005 [YR2005]	2010 [YR2010]	2015 [YR2015]	2019 [YR2016]	2020 [YR2017]
Benin	828,65m	1752,87m	2464,04m	3005,57m	3867,88m	4243,00m
Burkina Faso	739,54m	1645,44m	2440,80m	2677,98m	3225,93m	3547,72m
Cameroon	1691,90m	2528,17m	3681,41m	4568,93m	5659,06m	6042,38m
Chad	565,19m	3578,27m	5541,61m	5518,51m	4819,54m	4817,38m
Cote d'Ivoire	2684,76m	3861,58m	6109,98m	8412,58m	12100,81m	..
Gabon	315,68m	477,67m	562,61m	620,15m	937,28m	998,59m
Gambia, The	192,07m	329,80m	543,13m	306,08m	398,03m	..
Guinea	628,48m	654,41m	1198,33m	1625,01m	3268,80m	3711,27m
Guinea-Bissau	154,85m	260,40m	383,19m	490,45m	437,60m	441,89m
Mali	974,38m	2022,85m	3529,22m	4943,54m	6451,10m	6278,65m
Mozambique	1080,12m	1944,81m	2981,13m	3655,35m	3979,86m	..
Niger	819,93m	1721,79m	2812,41m	3138,28m	4881,33m	..
Nigeria	14832,34m	45952,12m	86365,38m	100436,74m	98166,59m	104370,01m
Senegal	988,52m	1671,21m	2570,59m	2538,69m	3492,78m	3940,33m
Sierra Leone	349,82m	815,20m	1364,88m	2474,36m	2239,81m	2368,92m
Togo	455,95m	833,88m	985,60m	1019,04m	1426,40m	1422,26m
Uganda	1703,71m	2316,73m	8615,64m	7623,23m	8107,22m	8979,83m
African Group	29005,89m	72367,19m	132149,95m	153054,51m	163460,04m	151162,24m
Algeria	4599,68m	7937,30m	13648,52m	19218,25m	21189,98m	20653,52m
Bahrain	..	..	76,54m	98,19m	108,67m	..
Comoros	103,15m	192,08m	276,17m	295,59m	385,56m	..
Djibouti	..	..	..	27,91m	42,28m	44,27m
Egypt, Arab Rep.	15512,99m	12527,79m	29214,08m	37528,23m	33487,33m	41783,13m
Iraq	2241,56m	3440,32m	7150,63m	6990,95m	7416,85m	10150,47m
Jordan	170,51m	347,25m	970,09m	1694,85m	2186,27m	2273,25m
Kuwait	133,96m	243,49m	520,94m	615,82m	523,79m	..
Lebanon	1076,62m	769,53m	1484,69m	1689,24m	1597,81m	836,04m
Libya	..	1188,09m	..	..	..	..
Mauritania	441,83m	589,26m	941,88m	1272,19m	1421,28m	1410,79m
Morocco	4615,18m	7366,47m	12065,53m	12777,06m	14559,38m	13799,79m
Oman	437,37m	502,43m	810,58m	1361,43m	1796,04m	..
Palestine	417,60m	460,80m	871,60m	1035,20m	1208,60m	..
Qatar	66,21m	59,34m	147,53m	260,92m	404,50m	419,59m
Saudi Arabia	9326,25m	10579,05m	13946,13m	17137,87m	17709,62m	17941,03m
Somalia	..	..	..	..	..	..
Sudan	4986,58m	8116,20m	15299,65m	20793,25m	7019,49m	5461,65m
Syrian Arab Republic	4665,82m	5981,44m	..	..	..	..
Tunisia	2148,68m	2959,38m	3319,06m	4439,41m	4024,88m	4606,06m
United Arab Emirates	2360,79m	2520,35m	2212,39m	2653,78m	3077,88m	..
Yemen, Rep.	1326,72m	1767,13m	2522,66m	3015,59m	..	..
Arab Group	54631,50m	67547,71m	105478,67m	132905,72m	118160,19m	119379,58m
Afghanistan	..	1931,96m	4156,02m	4107,70m	4972,08m	5350,59m
Albania	853,22m	1517,43m	2141,58m	2252,34m	2822,43m	2849,24m
Azerbaijan	848,12m	1211,66m	2933,59m	3278,74m	2743,71m	2950,88m
Bangladesh	12124,63m	12896,28m	19598,80m	28838,47m	38365,86m	41000,53m
Brunei Darussalam	61,48m	90,22m	100,48m	142,56m	132,82m	143,37m
Guyana	213680863,9	238273921,2	979357123,1	1088923346	910338315,3	921971223
Indonesia	25873,16m	37524,88m	105178,67m	116151,99m	142266,72m	145045,71m
Iran, Islamic Rep.	9938,24m	14722,52m	31639,53m	40361,02m	31459,16m	24555,55m
Kazakhstan	1483,62m	3638,51m	6677,72m	8685,70m	8113,87m	9039,17m
Kyrgyz Republic	468,27m	700,76m	836,53m	939,00m	1034,81m	1044,88m
Malaysia	8065,00m	11859,21m	25730,96m	24974,78m	26460,51m	27626,95m
Maldives	..	89,91m	145,82m	228,68m	295,27m	..
Pakistan	21010,70m	27565,20m	41246,98m	64438,52m	61324,06m	59840,66m
Suriname	90,40m	88,22m	413,78m	533,56m	365,78m	..
Tajikistan	216,20m	490,02m	1105,12m	1785,85m	1732,13m	1949,21m
Turkey	27520,41m	46404,88m	69672,37m	59364,51m	48908,12m	47552,25m
Turkmenistan	654,69m	1501,81m	2561,05m	3331,71m	4881,14m	..
Uzbekistan	4135,85m	3767,32m	13397,93m	25187,17m	14745,96m	15043,47m
Asian Group	113557,66m	166239,06m	328516,28m	385691,25m	391534,76m	384914,43m
OIC Total	197195,05m	306153,97m	566144,91m	671651,47m	673154,99m	655456,26m
World Total	1124864,89m	1514778,16m	2533379,22m	3166932,53m	3526771,49m	3686330,48m

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	0,24163641	0,292123618	0,386715	0,272371	0,255003	0,134651
Burkina Faso	0,355319771	0,366418184	0,535797	0,419078	0,394342	0,203908
Cameroon	0,763211622	0,75570043	0,823211	0,63207	0,67277	0,324506
Chad	0,251776357	0,289509965	0,560526	0,588597	0,500834	0,214518
Cote d'Ivoire	1,307211693	1,264882269	1,257387	1,049061	1,109611	0,494609
Gabon	0,178862504	0,146264303	0,155536	0,096572	0,091307	0,047922
Gambia, The	0,157293055	0,186039611	0,107429	0,093345	0,045104	0,018861
Guinea	0,6972095	0,462789067	0,191168	0,205949	0,239463	0,11378
Guinea-Bissau	0,199051405	0,07621875	0,084789	0,065793	0,072218	0,040259
Mali	0,509011869	0,47539608	0,638315	0,59326	0,717037	0,381579
Mozambique	0,435943837	0,537584285	0,633046	0,511811	0,538656	0,209828
Niger	0,363066518	0,403677439	0,562784	0,485548	0,464118	0,28654
Nigeria	6,182451885	7,367621577	14,96865	14,92124	15,03695	5,199645
Senegal	0,525467019	0,503614401	0,532513	0,436465	0,373822	0,217751
Sierra Leone	0,256754754	0,19673584	0,265548	0,234573	0,367811	0,139988
Togo	0,212379319	0,202030442	0,22756	0,180847	0,150054	0,072815
Uganda	1,281685575	0,998826557	0,970952	0,824937	0,878586	0,379442
African Group	13,91833309	14,52540582	22,90193	21,61151	21,90768	8,480603
Algeria	2,001882403	2,30829832	2,585531	2,345687	2,831996	2,885043
Bahrain	0,023995248	0,028690379	0,016797	0,013154	0,01447	0,01942
Comoros	0,070477931	0,07532195	0,092919	0,047418	0,043732	0,067231
Djibouti	0,006789459	0,008459712	0,007363	0,005462	0,004187	0,006626
Egypt, Arab Rep.	5,072445302	6,175392448	4,200775	4,920869	5,335147	5,856573
Iraq	0,367267316	0,483094029	1,120668	1,228933	1,030192	1,123309
Jordan	0,167701598	0,11899317	0,158916	0,190731	0,285718	0,239859
Kuwait	0,054737696	0,066391865	0,079205	0,089348	0,090615	0,094518
Lebanon	0,290552981	0,377917912	0,249256	0,254023	0,251526	0,309082
Libya	1,016945008	1,322013774	0,36038	0,345141	0,018873	0,466364
Mauritania	0,328639077	0,216266214	0,196317	0,159277	0,187966	0,228184
Morocco	2,530322646	2,292687877	2,399714	2,073639	1,882827	2,447431
Oman	0,190242292	0,217252773	0,14247	0,139309	0,219804	0,207747
Palestine	0,318664986	0,35457252	0,150103	0,149796	0,152548	0,217735
Qatar	0,038412048	0,032887698	0,01933	0,025355	0,038449	0,035698
Saudi Arabia	4,048593624	4,632542821	3,446104	2,396835	2,525448	3,454759
Somalia	0,335806005	0,557825211	0,398102	0,099344	0,113363	0,255339
Sudan	2,477247478	2,476969239	2,643808	3,929577	3,951942	3,950496
Syrian Arab Republic	1,834561678	2,416134428	1,877147	2,051292	0,581155	1,763228
Tunisia	0,919519414	1,067318789	0,963975	0,57043	0,654186	0,859406
United Arab Emirates	0,510080523	1,059494875	0,741809	0,380213	0,391077	0,601111
Yemen, Rep.	0,488841733	0,649563639	0,588843	0,638535	0,704558	0,734342
Arab Group	23,09372645	26,93808964	22,43953	22,05437	21,30978	25,8235
Afghanistan	1,021405666	1,00000673	0,738395	0,766964	0,660611	0,892617
Albania	0,650093379	0,424698842	0,494296	0,368061	0,331909	0,472108
Azerbaijan	0,372675965	0,418486955	0,392063	0,502027	0,483175	0,524571
Bangladesh	4,608977157	5,560240647	3,626921	3,345789	4,236311	4,659574
Brunei Darussalam	0,028246904	0,032648593	0,031428	0,017276	0,021021	0,026989
Guyana	0,162923433	0,143221978	0,101296	0,061848	0,080009	0,107058
Indonesia	16,07529496	12,41220992	11,86339	18,07641	17,11624	18,3854
Iran, Islamic Rep.	6,929311691	4,779932231	4,795782	5,485621	6,078719	6,508613
Kazakhstan	1,218072119	0,736956106	1,185223	1,147658	1,279934	1,338556
Kyrgyz Republic	0,291550986	0,232611456	0,228217	0,14377	0,138372	0,206488
Malaysia	5,527129317	4,006103765	3,863081	4,422239	3,680301	4,775715
Maldives	0,017965862	0,023836027	0,029286	0,025061	0,033698	0,031967
Pakistan	9,577235016	10,41857253	8,763641	6,98252	9,372135	10,00333
Suriname	0,12302753	0,118848225	0,076017	0,071097	0,063868	0,091624
Tajikistan	0,19969906	0,10739592	0,159623	0,189931	0,253863	0,229659
Turkey	12,54845606	13,66972927	15,11633	11,97377	8,746694	13,31931
Turkmenistan	0,169714517	0,562256826	0,856098	0,440152	0,49408	0,583039
Uzbekistan	3,466160844	3,88874852	2,337474	2,313924	3,711599	3,539299
Asian Group	62,98794046	58,53650454	54,65856	56,33412	56,78254	65,69591
OIC Total	100	100	100	100	100	100

Source: World Development Indicator

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

Country Name	2000	2005	2010	2015	2019	2020
Benin	3519,99m	6567,65m	9535,35m	11388,16m	14391,69m	15651,55m
Burkina Faso	2968,37m	6146,35m	10109,62m	11832,16m	15990,80m	17369,06m
Cameroon	10109,05m	17951,22m	26169,32m	30928,65m	39007,35m	39802,15m
Chad	1388,51m	6649,31m	10668,10m	10950,39m	11314,95m	10093,12m
Cote d'Ivoire	10743,71m	17091,72m	24908,78m	45814,64m	58539,42m	61348,58m
Gabon	5080,48m	9582,78m	14372,59m	14383,11m	16874,45m	15593,18m
Gambia, The	782,92m	1027,70m	1543,29m	1378,18m	1826,07m	1901,93m
Guinea	2995,36m	2937,07m	6853,47m	8794,20m	13513,81m	15681,05m
Guinea-Bissau	371,10m	587,03m	849,88m	1048,23m	1439,64m	1431,76m
Mali	2961,48m	6247,52m	10689,17m	13104,76m	17281,82m	17393,76m
Mozambique	5656,47m	8542,07m	11104,65m	15950,97m	15291,45m	14021,42m
Niger	2241,75m	4383,32m	7851,19m	9685,58m	12911,69m	13678,23m
Nigeria	69448,76m	176134,09m	361456,62m	486803,30m	448120,43m	432293,78m
Senegal	6046,73m	11069,29m	16121,31m	17774,77m	23306,21m	24910,90m
Sierra Leone	635,87m	1650,49m	2578,03m	4218,72m	4121,73m	3865,02m
Togo	1491,89m	2281,48m	3429,46m	4180,87m	7220,40m	7574,64m
Uganda	6193,25m	9239,22m	26558,91m	32248,12m	35170,04m	37372,03m
African Group	132635,68m	288088,32m	544799,74m	720484,80m	736321,95m	729982,15m
Algeria	54790,38m	103198,25m	161207,31m	165979,17m	171157,80m	145163,90m
Bahrain	9062,90m	15968,72m	25713,27m	31050,64m	38474,52m	..
Comoros	351,14m	653,85m	907,98m	966,03m	1165,84m	1219,69m
Djibouti	551,23m	708,63m	1128,61m	2430,29m	3324,63m	3384,40m
Egypt, Arab Rep.	99838,54m	89600,67m	218983,67m	329366,58m	303080,87m	363069,25m
Iraq	48364,25m	49954,89m	138516,72m	166774,11m	222434,14m	167224,43m
Jordan	8460,42m	12588,67m	27133,80m	38587,02m	44502,90m	43697,66m
Kuwait	37712,84m	80798,63m	115419,40m	114567,30m	136196,76m	..
Lebanon	17260,36m	21497,34m	38443,91m	49939,37m	51991,63m	33383,25m
Libya	38270,21m	47334,15m	74773,44m	27842,13m	52091,15m	25418,46m
Mauritania	1779,52m	2936,02m	5628,88m	6166,86m	7600,65m	7778,53m
Morocco	38857,25m	62343,02m	93216,75m	101179,81m	119700,33m	112870,59m
Oman	19507,45m	31081,99m	56913,07m	68420,26m	76331,52m	..
Palestine	4313,60m	5125,70m	9681,50m	13972,40m	17133,50m	15561,30m
Qatar	17759,89m	44530,49m	125122,31m	161739,96m	175837,55m	146373,59m
Saudi Arabia	189514,93m	328459,70m	528207,33m	654269,90m	792966,84m	700117,87m
Somalia	..	..	..	4048,86m	4942,32m	4917,61m
Sudan	12257,42m	26524,54m	65634,00m	64458,52m	32250,45m	26110,83m
Syrian Arab Republic	19325,89m	28858,97m	..	..	..	..
Tunisia	21473,26m	32273,01m	44050,93m	43173,53m	39195,72m	39235,67m
United Arab Emirates	104337,37m	180617,47m	289787,34m	358135,06m	421142,27m	..
Yemen, Rep.	9652,44m	16746,34m	30906,75m	42445,10m	..	..
Arab Group	753441,31m	1181801,04m	2051376,97m	2445512,90m	2711521,38m	1835527,03m
Afghanistan	..	6209,14m	15856,57m	19907,11m	19291,10m	19807,07m
Albania	3480,36m	8052,08m	11926,93m	11386,85m	15286,61m	14799,62m
Azerbaijan	5272,80m	13245,72m	52909,29m	53074,37m	48174,24m	42607,18m
Bangladesh	53369,79m	69442,94m	115279,08m	195078,68m	302563,40m	324239,18m
Brunei Darussalam	6001,15m	9531,40m	13707,37m	12930,39m	13469,42m	12016,06m
Guyana	712,67m	824,88m	3432,91m	4279,84m	5173,76m	5471,26m
Indonesia	165021,01m	285868,62m	755094,16m	860854,24m	1119091,26m	1058423,84m
Iran, Islamic Rep.	109591,71m	226452,14m	486807,62m	384951,48m	258245,50m	191718,27m
Kazakhstan	18291,99m	57123,67m	148047,35m	184388,43m	181667,19m	169835,43m
Kyrgyz Republic	1369,69m	2460,25m	4794,36m	6678,18m	8871,02m	7735,98m
Malaysia	93789,74m	143534,10m	255016,61m	301354,80m	364681,37m	336664,44m
Maldives	624,34m	1163,36m	2588,18m	4109,45m	5642,18m	4030,20m
Pakistan	82017,74m	120055,29m	177165,64m	270556,13m	278221,91m	263686,55m
Suriname	947,67m	1793,39m	4368,40m	5126,29m	4221,37m	3807,92m
Tajikistan	860,52m	2312,33m	5642,18m	8271,45m	8300,78m	8194,15m
Turkey	274302,96m	506308,31m	776992,60m	864316,67m	761428,18m	720101,21m
Turkmenistan	2904,73m	8103,90m	22583,16m	35799,71m	45231,43m	..
Uzbekistan	13760,51m	14307,51m	46679,88m	81847,41m	57726,54m	57707,19m
Asian Group	832319,38m	1476789,03m	2898892,27m	3304911,49m	3497287,27m	3240845,54m
OIC Total	1718396,37m	2946678,39m	5495068,98m	6470909,19m	6945130,60m	5806354,72m
World Total	5512,22	7305,39	9558,77	10223,00	11394,86	10909,29

Source: World Development Indicator

Annex 5: Total GDP/Breakdown at Constant 2010 Prices in US Dollars

Country Name	1995	2000	2005	2010	2015	2016	2017
Benin	3727.42m	4766.64m	5772.74m	6970.24m	8755.15m	9102.28m	9633.65m
Burkina Faso	3643.67m	5046.71m	6871.59m	8979.97m	11688.05m	12381.64m	13161.94m
Cameroon	14337.57m	17770.52m	22022.57m	26143.82m	33558.48m	35118.43m	36364.82m
Chad	3393.66m	3858.67m	8407.92m	10657.71m	13486.24m	12642.61m	12264.76m
Cote d'Ivoire	19108.38m	22300.41m	22300.77m	24884.50m	33963.22m	36670.68m	39495.09m
Gabon	12319.19m	12480.56m	13441.04m	14358.58m	18526.41m	18913.88m	19004.62m
Gambia, The	524.15m	653.00m	757.51m	951.81m	1057.12m	1061.41m	1109.78m
Guinea	4166.80m	5049.27m	5874.39m	6853.47m	8578.67m	9507.64m	10777.87m
Guinea-Bissau	725.68m	660.50m	720.13m	849.05m	998.01m	1060.51m	1123.28m
Mali	4760.91m	6071.47m	8527.27m	10678.75m	12686.03m	13421.82m	14146.60m
Mozambique	2688.22m	4635.07m	7095.69m	10154.24m	14307.68m	14846.12m	15400.91m
Niger	3179.65m	3657.58m	4444.40m	5718.66m	7726.73m	8107.35m	8504.07m
Nigeria	145587.83m	169200.01m	258000.86m	363359.89m	464282.24m	456775.41m	460456.50m
Senegal	8927.65m	10915.43m	13707.45m	16215.07m	20164.45m	21446.18m	22965.19m
Sierra Leone	1359.77m	1385.75m	1997.93m	2578.03m	3163.80m	3355.38m	3496.69m
Togo	2113.45m	2613.55m	2762.41m	3426.02m	4615.82m	4842.84m	5058.32m
Uganda	7393.26m	9908.90m	13703.81m	20186.50m	26260.23m	27515.73m	28578.67m
African Group	237957.27m	280974.06m	396408.50m	532966.30m	683818.33m	686769.90m	701542.77m
Algeria	93174.67m	110423.59m	142251.90m	161207.27m	189772.33m	196034.82m	199171.38m
Bahrain	12350.78m	15256.28m	19620.44m	25713.27m	30779.22m	31847.55m	33058.88m
Comoros	597.63m	702.24m	786.93m	907.09m	1051.18m	1074.18m	1103.26m
Djibouti	..	..	..	1128.61m	..	..	..
Egypt, Arab Rep.	103369.95m	136353.11m	162211.02m	218888.32m	249940.81m	260804.84m	271709.67m
Iraq	46941.53m	101597.12m	104187.99m	138516.72m	188465.54m	214044.49m	210467.19m
Jordan	12305.02m	14408.40m	19622.48m	26551.48m	30350.56m	30958.70m	31613.70m
Kuwait	66799.06m	73401.58m	108931.46m	115419.05m	137963.71m	142000.70m	137056.87m
Lebanon	18691.93m	21967.85m	26597.77m	38419.63m	41812.92m	42484.24m	42718.75m
Libya	..	48026.34m	61714.05m	74773.44m	37867.41m	36808.84m	46627.92m
Mauritania	2412.85m	2700.58m	3386.60m	4337.79m	5457.47m	5566.62m	5735.26m
Morocco	47069.03m	57519.65m	73014.08m	93216.75m	113383.50m	114660.18m	119346.92m
Oman	35920.41m	42407.80m	44278.54m	58642.39m	71221.33m	74768.27m	74074.38m
Palestine	4804.28m	6312.38m	6983.24m	8913.10m	11238.08m	11767.22m	12136.74m
Qatar	..	36044.30m	53352.37m	125122.31m	167122.80m	170684.71m	173381.27m
Saudi Arabia	349402.02m	379223.41m	461601.73m	528207.20m	678729.65m	690068.80m	684951.73m
Somalia	..	..	..	..	..	..	..
Sudan	25423.87m	34053.11m	46433.22m	65634.11m	72731.12m	76149.48m	79411.02m
Syrian Arab Rep.	..	..	..	..	..	..	..
Tunisia	22168.04m	29142.31m	35279.54m	44050.93m	48167.87m	48776.00m	49666.00m
United Arab Emr.	151381.73m	198234.19m	257366.94m	289787.34m	373073.38m	384222.46m	387259.36m
Yemen, Rep.	15818.89m	20345.85m	25002.18m	30906.75m	24080.16m	20800.09m	19564.09m
Arab Group	903106.24m	1202440.25m	1490750.12m	1863423.02m	2252657.48m	2325639.81m	2346824.13m
Afghanistan	..	..	9164.60m	15856.57m	19759.74m	20206.38m	20744.94m
Albania	5429.71m	6933.73m	9223.23m	11926.95m	13034.27m	13470.92m	13987.75m
Azerbaijan	9490.95m	13351.06m	24740.90m	52902.70m	58511.00m	56718.11m	56558.15m
Bangladesh	52933.64m	67013.46m	85860.36m	115279.08m	156629.55m	167771.38m	179992.15m
Brunei Darussalam	11205.27m	11971.15m	13264.41m	13707.37m	13637.70m	13301.46m	13478.20m
Guyana	1568.32m	1795.05m	1837.31m	2273.23m	2831.92m	2925.83m	2986.69m
Indonesia	437209.21m	453413.62m	571204.95m	755094.16m	988128.60m	1037861.79m	1090454.47m
Iran, Islamic Rep.	274304.42m	316232.66m	400345.00m	487069.57m	476718.83m	540581.25m	560881.09m
Kazakhstan	59126.24m	66851.17m	109482.47m	148047.35m	186260.30m	188309.16m	196029.84m
Kyrgyz Republic	2440.01m	3205.08m	3859.38m	4794.36m	6075.31m	6336.54m	6634.36m
Malaysia	128613.23m	162523.12m	204863.38m	255016.61m	330321.32m	344272.14m	364573.90m
Maldives	1168.95m	1619.84m	1748.80m	2588.18m	3412.57m	3661.31m	3914.37m
Pakistan	100147.02m	117555.26m	149990.71m	177406.85m	215932.85m	227866.89m	240856.71m
Suriname	2452.93m	2696.86m	3481.76m	4368.40m	4732.95m	4469.74m	4545.15m
Tajikistan	2577.51m	2582.67m	4095.67m	5642.18m	7912.97m	8456.82m	9101.02m
Turkey	427852.04m	520947.37m	658128.61m	771901.77m	1087875.53m	1122511.66m	1206039.92m
Turkmenistan	8644.09m	10753.70m	13788.27m	22583.16m	37253.65m	39563.38m	42135.00m
Uzbekistan	16689.48m	20169.34m	26164.85m	39332.77m	57318.39m	60811.56m	63524.75m
Asian Group	1541853.01m	1779615.16m	2291244.66m	2885791.26m	3666347.44m	3859096.32m	4076438.46m
OIC Total	2682916.51m	3263029.46m	4178403.28m	5282180.57m	6602823.25m	6871506.04m	7124805.37m
World Total	42210614.33	50036361.14	58161311.62	66036918.50	75802901.43	77752106.72	80209237.76

Source: FAOSTAT

Annex 6: Total Population, Thousands

Country Name	1995	2000	2005	2010	2015	2020
Benin	5906	6866	7982	9199	10576	12123
Burkina Faso	10090	11608	13422	15605	18111	20903
Cameroon	13600	15514	17733	20341	23298	26546
Chad	7010	8356	10097	11952	14111	16426
Cote d'Ivoire	14200	16455	18355	20533	23226	26378
Gabon	1085	1228	1391	1624	1948	2226
Gambia, The	1129	1318	1544	1793	2086	2417
Guinea	7270	8241	9110	10192	11432	13133
Guinea-Bissau	1089	1201	1345	1523	1737	1968
Mali	9586	10946	12776	15049	17439	20251
Mozambique	15483	17712	20494	23532	27042	31255
Niger	9490	11332	13624	16464	20002	24207
Nigeria	107948	122284	138865	158503	181137	206140
Senegal	8690	9798	11090	12678	14578	16744
Sierra Leone	4304	4585	5646	6416	7172	7977
Togo	4226	4924	5612	6422	7323	8279
Uganda	20413	23650	27685	32428	38225	45741
African Group	241,518k	276,017k	316,768k	364,255k	419,444k	482,714k
Algeria	28758	31042	33150	35977	39728	43851
Bahrain	564	0665	889	1241	1372	1702
Comoros	475	542	612	690	777	870
Djibouti	630	718	783	840	914	988
Egypt, Arab Rep.	62334	68832	75524	82761	92443	102334
Iraq	20149	23498	26922	29742	35572	40223
Jordan	4589	5122	5766	7262	9267	10203
Kuwait	1606	2045	2270	2992	3836	4271
Lebanon	3528	3843	4699	4953	6533	6825
Libya	4949	5358	5799	6198	6418	6871
Mauritania	2314	2630	3024	3494	4046	4650
Morocco	26994	28794	30456	32343	34664	36911
Oman	2204	2268	2511	3041	4267	5107
Palestine	2475	2922	3320	3786	4270	4803
Qatar	0513	0592	865	1856	2566	2881
Saudi Arabia	18639	20664	23816	27421	31718	34814
Somalia	7492	8872	10447	12044	13797	15893
Sudan	24095	27275	30950	34545	38903	43849
Syrian Arab Republic	14345	16411	18361	21363	17997	17501
Tunisia	9125	9708	10107	10635	11180	11819
United Arab Emirates	2415	3134	4588	8550	9263	9890
Yemen, Rep.	14913	17409	20107	23155	26498	29826
Arab Group	253,107k	282,344k	314,966k	354,890k	396,028k	436,082k
Afghanistan	18111	20780	25654	29186	34414	38928
Albania	3188	3089	3011	2913	2881	2838
Azerbaijan	7685	8049	8392	9054	9649	10110
Bangladesh	115170	127658	139036	147575	156256	164689
Brunei Darussalam	297	333	365	389	415	437
Guyana	761	747	746	749	767	787
Indonesia	196934	211514	226289	241834	258383	273524
Iran, Islamic Rep.	61443	65623	69762	73763	78492	83993
Kazakhstan	15816	14884	15147	16322	17543	18754
Kyrgyz Republic	4560	4898	5163	5448	5957	6592
Malaysia	20488	23194	25691	28208	30271	32366
Maldives	254	279	320	366	455	541
Pakistan	123777	142344	160304	179425	199427	220892
Suriname	442	471	499	529	559	587
Tajikistan	5765	6216	6789	7527	8454	9538
Turkey	58486	63240	67903	72327	78529	84339
Turkmenistan	4208	4516	4755	5087	5565	6031
Uzbekistan	22785	24650	26167	28562	31299	34232
Asian Group	660,169k	722,486k	785,994k	849,264k	919,317k	989,178k
OIC Total	1,154,795k	1,280,847k	1,417,728k	1,568,409k	1,734,789k	1,907,974k
World Total	5,707,533k	6,115,108k	6,512,603k	6,922,947k	7,340,548k	7,673,345k

Source: World Development Indicator

Annex 7: Rural Population, Thousands

Country Name	1995	2000	2005	2010	2015	2020
Benin	3735	4234	4746	5235	5743	6254
Burkina Faso	8563	9537	10531	11761	13125	14505
Cameroon	7810	8449	9125	9854	10583	11266
Chad	5505	6548	7895	9324	10934	12563
Cote d'Ivoire	8348	9354	10052	10815	11742	12739
Gabon	273	259	244	235	231	221
Gambia, The	639	687	741	795	850	904
Guinea	5127	5697	6171	6760	7415	8290
Guinea-Bissau	715	766	832	912	1005	1098
Mali	7139	7842	8680	9632	10465	11359
Mozambique	11226	12558	14346	16041	17740	19668
Niger	7993	9497	11412	13793	16752	20182
Nigeria	73184	79680	84605	89586	94485	99034
Senegal	5248	5847	6464	7129	7892	8686
Sierra Leone	2822	2951	3561	3923	4244	4553
Togo	2929	3304	3637	4011	4387	4735
Uganda	17791	20153	22989	26143	29793	34327
African Group	169,048k	187,364k	206,032k	225,948k	247,386k	270384k
Algeria	12654	12442	11990	11678	11582	11518
Bahrain	65	77	0103	141	151	179
Comoros	341	390	441	0497	556	614
Djibouti	149	168	182	193	206	217
Egypt, Arab Rep.	35646	39374	43028	47158	52891	58553
Iraq	6291	7403	8409	9189	10700	11708
Jordan	1000	1113	1183	1010	903	876
Kuwait	1606	2045	2270	2992	3836	0
Lebanon	536	538	628	627	777	756
Libya	1188	1265	1329	1360	1331	1327
Mauritania	1418	1628k	1751	1866	1979	2077
Morocco	13040	13437	13652	13578	13585	13461
Oman	624	645	693	755	796	701
Palestine	737	819	894	979	1052	1118
Qatar	26	22	23	28	27	22
Saudi Arabia	3976	4164	4530	4913	5335	5470
Somalia	5137	5922	6654	7309	7831	8560
Sudan	16329	18412	20810	23114	25717	28391
Syrian Arab Republic	7158	7886	8486	9485	8609	7792
Tunisia	3516	3550	3513	3546	3571	3597
United Arab Emirates	524	619	814	1361	1327	1281
Yemen, Rep.	11370	12836	14289	15797	17283	18520
Arab Group	123,331k	133,127k	145,672k	157,576k	170,045k	176738k
Afghanistan	14194	16192	19830	22258	25878	28797
Albania	1947	1800	1604	1394	1226	1075
Azerbaijan	3673	3913	3995	4219	4370	4408
Bangladesh	90186	97543	101761	102621	102648	101816
Brunei Darussalam	93	96	98	97	97	95
Guyana	539	532	539	550	565	576
Indonesia	125888	122674	122328	121125	120631	118597
Iran, Islamic Rep.	24432	23597	22632	21667	20912	20264
Kazakhstan	6971	6534	6595	7047	7510	7939
Kyrgyz Republic	2903	3169	3341	3524	3826	4162
Malaysia	9078	8819	8582	8205	7806	7392
Maldives	189	202	212	232	280	321
Pakistan	84371	95396	105830	116631	127581	138798
Suriname	150	158	166	178	190	199
Tajikistan	4100	4569	4989	5531	6193	6914
Turkey	22153	22298	21838	21101	20723	20153
Turkmenistan	2323	2443	2517	2620	2765	2864
Uzbekistan	12821	13280	13466	14008	15415	16974
Asian Group	406,013k	423,215k	440,324k	453,010k	468,615k	481344k
OIC Total	698,392k	743,706k	792,028k	836,534k	886,046k	928466k
World Total	3,147,042k	3,259,100k	3,310,653k	3,346,700k	3,382,164k	3397376k

Source: World Development Indicator

Annex 8: Rural Population, as Percentage of Total Population

Country Name	1995	2000	2005	2010	2015	2020
Benin	63.242	61.667	59.457	56.907	54.305	51,585
Burkina Faso	84.869	82.156	78.463	75.367	72.47	69,393
Cameroon	57.427	54.458	51.459	48.441	45.422	42,44
Chad	78.527	78.363	78.199	78.015	77.485	76,48
Cote d'Ivoire	58.79	56.845	54.766	52.67	50.556	48,294
Gabon	25.203	21.121	17.548	14.467	11.882	9,908
Gambia, The	56.638	52.132	47.98	44.338	40.772	37,418
Guinea	70.525	69.131	67.743	66.322	64.859	63,125
Guinea-Bissau	65.629	63.757	61.843	59.889	57.877	55,804
Mali	74.481	71.644	67.94	64.001	60.009	56,091
Mozambique	72.505	70.902	70.001	68.17	65.6	62,926
Niger	84.227	83.814	83.758	83.779	83.753	83,374
Nigeria	67.795	65.16	60.926	56.52	52.162	48,042
Senegal	60.394	59.68	58.286	56.227	54.138	51,878
Sierra Leone	65.571	64.374	63.081	61.144	59.171	57,077
Togo	69.295	67.093	64.815	62.467	59.9	57,2
Uganda	87.154	85.214	83.04	80.617	77.94	75,046
African Group	67.19247059	65.14770588	62.90029412	60.54947059	58.13535294	55,65
Algeria	44.003	40.081	36.17	32.46	29.152	26,267
Bahrain	11.612	11.628	11.578	11.366	11.001	10,494
Comoros	71.699	71.92	72.125	72.027	71.53	70,62
Djibouti	23.7	23.468	23.239	23.001	22.583	21,938
Egypt, Arab Rep.	57.186	57.203	56.973	56.981	57.215	57,217
Iraq	31.22	31.504	31.234	30.897	30.079	29,107
Jordan	21.793	21.73	20.515	13.912	9.744	8,582
Kuwait	1.904	1	0	0	0	0
Lebanon	15.18	14	13.373	12.666	11.894	11,075
Libya	24.006	23.613	22.92	21.948	20.73	19,309
Mauritania	61.295	61.909	57.889	53.412	48.911	44,673
Morocco	48.308	46.665	44.826	41.982	39.191	36,468
Oman	28.331	28.431	27.6	24.839	18.65	13,724
Palestine	29.784	28.031	26.939	25.851	24.632	23,281
Qatar	5.002	3.689	2.604	1.499	1.055	0,765
Saudi Arabia	21.33	20.152	19.021	17.916	16.82	15,713
Somalia	68.575	66.753	63.689	60.69	56.755	53,859
Sudan	67.768	67.505	67.24	66.911	66.106	64,747
Syrian Arab Republic	49.896	48.053	46.218	44.4	47.832	44,525
Tunisia	38.526	36.568	34.763	33.343	31.944	30,432
United Arab Emirates	21.681	19.764	17.738	15.913	14.326	12,952
Yemen, Rep.	76.24	73.733	71.064	68.224	65.223	62,092
Arab Group	37.22904545	34.438	34.099	31.194	31.536	29,90
Afghanistan	78.376	77.922	77.297	76.263	75.197	73,974
Albania	61.089	58.259	53.269	47.837	42.566	37,888
Azerbaijan	47.794	48.614	47.611	46.594	45.286	43,603
Bangladesh	78.307	76.41	73.191	69.538	65.692	61,823
Brunei Darussalam	31,356	28,836	26,837	25,039	23,337	21,75
Guyana	70.863	71.306	72.178	73.366	73.559	73,214
Indonesia	63.924	57.998	54.058	50.086	46.687	43,359
Iran, Islamic Rep.	39.764	35.958	32.442	29.374	26.642	24,126
Kazakhstan	44.079	43.902	43.537	43.173	42.809	42,329
Kyrgyz Republic	63.651	64.702	64.71	64.694	64.223	63,144
Malaysia	44.312	38.023	33.406	29.088	25.787	22,84
Maldives	74.362	72.294	66.25	63.566	61.471	59,331
Pakistan	68.164	67.018	66.018	65.003	63.974	62,835
Suriname	33.924	33.556	33.318	33.656	33.944	33,851
Tajikistan	71.123	73.499	73.49	73.48	73.258	72,494
Turkey	37.877	35.259	32.16	29.175	26.389	23,895
Turkmenistan	55.206	54.087	52.948	51.509	49.683	47,484
Uzbekistan	56.269	53.874	51.463	49.044	49.25	49,584
Asian Group	56.69111111	55.08427778	53.01016667	51.13805556	49.43077778	47,64
OIC Total	53.70420905	49.741	47.863	45.833	44.178	42,85
World Total	55.15827083	53.31094036	50.8481466	48.35478997	46.0866268	43,85

Source: World Development Indicators

Annex 9: Employment by Sector, Agriculture, Thousands

Area Name	2000	2005	2010	2015	2019
Benin	1292.4	1457.4	1597.6	1710.9	1823
Burkina Faso	3758.3	3444.2	2709.9	1791.8	1765.8
Cameroon	4308.4	4799.1	4595.6	4531.8	4761.8
Chad	2895.1	3005.2	3078.3	3248.6	4503.2
Côte d'Ivoire	2516.3	2910.8	3383.8	3945.4	3305.5
Gabon	115.4	130.5	148.9	177.2	189.6
Gambia	130.4	147.5	162	181	192.2
Guinea	1922.2	2039	2227.8	2428	2626
Guinea-Bissau	334.7	378.8	428.1	486.1	531.4
Mali	2800.4	3030.2	3536.4	3705.9	4259.7
Mozambique	6675.3	7350.5	7780.8	8098.7	8978.7
Niger	3563.3	4149.5	5018	5455.6	6292.8
Nigeria	19387.5	20219	21154	19266.7	19312.7
Senegal	1217.3	1220.8	1189.7	1169.6	1194.2
Sierra Leone	1112.1	1345.8	1358.5	1339.3	1407.7
Togo	1024.3	1157.3	1249	1304.9	1366.5
Uganda	5694.3	6595.9	7545.4	10035.3	11882.1
African Group	109996,40	63381,50	67163,80	68876,80	74392,90
Algeria	1384.9	1559.5	1182.4	1078.8	1070.7
Bahrain	4.9	6	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	5405.4	6399	7072.2	6630.8	6545.6
Iraq	1356.7	1497.4	1460.6	1641.1	1652.9
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	3729	4296.7	4241.2	3980.8	3808.6
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	1726.1	1963.4	2190.6	2532.2	2891.8
Sudan	3447.2	3694.8	3760.2	3797.2	4137.2
Syrian Arab Republic	1448.1	1069.8	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	1467.8	1196.1	1098.3	1477.9	1699.6
Arab Group	22366,2	24168	24505,9	24866	25009
Afghanistan	2937.5	3575.6	3472.3	3831	4074.1
Albania	578.3	514.1	448.6	443.8	426.6
Azerbaijan	1277.1	1442	1603.2	1680.3	1733.9
Bangladesh	29131.1	25679.8	26112.2	26015.7	25875.8
Brunei Darussalam	1.8	1.6	1.2	1.4	2.7
Indonesia	41920.5	41067.7	42708.7	39329.7	36784.4
Iran (Islamic Republic of)	4161.3	5266.4	3995.3	4067.5	4438.2
Kazakhstan	2448.3	2407.6	2314.4	1563.7	1367.6
Kyrgyzstan	1010.5	803.9	719.6	690	513.9
Malaysia	1697.1	1542.2	1687.4	1766	1569.9
Maldives	16.9	20.6	20.8	22.5	23.6
Pakistan	18150	21130.8	24840.2	26795.3	25901.2
Tajikistan	774.9	860.6	965.8	977.4	985.2
Turkey	7872.7	5122.1	5340.6	5455	5304.8
Turkmenistan	481.4	522.3	540.6	524.8	506.9
Uzbekistan	3399.7	3753.9	3746.7	3625.9	3438.9
Guyana	60.4	53.3	52.2	48.4	47.9
Suriname	9.3	13.3	13.6	14.3	15.1
Asian Group	115928,8	113777,8	118583,4	116852,7	113010,7
OIC	248291,4	201327,3	210253,1	210595,5	212412,6
World	1047924.8	1042184.7	986358.6	910741.7	884,355

Source: ILO Estimates

Annex 10: Share of Agriculture in Total Employment, Percent

Country Name	1995	2000	2005	2010	2015	2017	2019
Benin	45.67499924	44.65100098	44.45000076	43.67200089	42.20199966	41.7820015	38,57799911
Burkina Faso	87.96199799	79.87999725	67.08200073	47.95700073	30.04899979	29.15500069	25,22500038
Cameroon	67.41000366	66.52200317	61.8730011	54.87799835	47.13000107	46.57500076	43,43700027
Chad	83.35099792	84.02600098	81.86900033	82.45400238	80.92199707	81.70600128	76,55599976
Cote d'Ivoire	48.54199982	47.79499817	46.98699951	46.11500168	48.45999908	48.42100143	40,04899979
Gabon	43.54000092	42.66500092	41.57099915	40.02799988	38.1230011	37.84700012	32,83100128
Gambia, The	30.68899918	30.3010006	31.45100021	30.90299988	29.94300079	29.94000053	27,12100029
Guinea	71.34300232	70.66000366	69.09899902	69.16600037	67.6760025	66.97000122	61,74200058
Guinea-Bissau	69.34600067	69.52400208	69.90899658	69.47299957	68.97599792	68.19000244	68,13800049
Mali	70.27300262	68.99900055	67.19999695	66.46299744	62.26599884	65.71600342	62,59099996
Mozambique	85.01000214	81.63700104	79.34300232	76.56600189	72.11599731	71.92099762	70,33499908
Niger	77.79299927	78.22100067	77.9980011	77.62400055	76.2009964	76.09700012	75,06300354
Nigeria	49.72700119	48.43600082	44.91199875	40.77799988	37.08000183	36.80799866	35,09799957
Senegal	49.87799835	48.77099991	44.6590004	39.90499878	33.33300018	32.49499893	30,04599953
Sierra Leone	65.71099854	71.48200226	68.14499664	64.25700378	59.73400116	59.24399948	54,93099976
Togo	37.93500137	36.12599945	37.82600021	37.68899918	35.60599899	34.91999817	37,69900131
Uganda	72.06400299	69.95999908	70.79599762	70.8010025	71.33699799	71.06999969	72,66600037
African Group	62.1322946	61.15623598	59.12764673	56.39582398	53.00905834	52.87394153	50,12388263
Algeria	22.78700066	22.04199982	18.65600014	11.83699989	8.656000137	9.38599968	9,855999947
Bahrain	2.02500095	1.649999976	1.348999977	1.083999991	1.075000048	1.047000051	0,986000001
Comoros	55.18500137	55.58800125	55.69499969	56.9070015	57.18399811	57.11500168	50,375
Djibouti	56.34400177	56.3429985	55.11999893	53.31100082	51.38999939	50.40599823	33,12200165
Egypt, Arab Rep.	33.99300003	29.62999916	30.94000053	28.27599907	25.81500053	25.04000092	23,79199982
Iraq	23.95299911	24.37000084	24.09499931	24.12800026	23.89900017	23.45800018	18,09900093
Jordan	4.321000099	4.035999775	4.052999973	3.792999983	3.592999935	3.50999999	3,084000111
Kuwait	2.072000027	2.413000107	2.707999945	2.45600009	2.286000013	2.288000107	2,010999918
Lebanon	15.80599976	14.96399975	14.02099991	13.07499981	12.56700039	12.24100018	13,60900021
Libya	9.699999809	9.279999733	9.06799984	8.43200016	8.281000137	8.036999702	18,90500069
Mauritania	62.82300186	61.73400116	59.88899994	58.30500031	55.43199921	55.7140007	51,27399826
Morocco	46.60800171	45.10400009	45.47700119	40.40200043	38.70199966	38.29299927	34,68999863
Oman	7.948999882	6.390999794	7.940999985	5.153999805	4.789999962	4.782999992	4,559999943
Palestine	12.43099976	14.06000042	15.03299999	11.8039999	8.651000023	6.678999901	6,085000038
Qatar	3.796000004	2.632999897	2.897000074	1.463000059	1.230000019	1.25	1,194000006
Saudi Arabia	7.044000149	6.123000145	4.151000023	4.178999901	6.099999905	4.925000191	2,403000116
Somalia	75.02500153	74.38400269	73.54199982	72.53700256	72.59700012	72.48300171	83,11199951
Sudan	50.81900024	49.16500092	47.433999863	44.45100021	43.67900085	43.2179985	39,93899918
Syrian Arab Republic	28.37999916	32.88999939	22.69799995	14.28199959	14.58399963	14.69400024	10,72900009
Tunisia	20.12299919	19.30400085	18.52499962	17.94599915	15.04199982	15.04199982	13,03100014
United Arab Emirates	7.995999813	7.895999908	5.40500021	4.186999798	3.872999907	3.75	1,409999967
Yemen, Rep.	52.77000046	41.26100159	30.97900009	28.67000008	30.68099976	35.32400131	28,97599983
Arab Group	27.36136393	26.42095481	24.98554535	23.03086379	22.27759081	22.21286374	20,51099995
Afghanistan	63.20199966	69.09400177	61.48300171	48.83800125	38.6780014	38.77399826	42,8390007
Albania	47.11500168	46.22600174	45.27099991	42.08399963	41.36299896	38.20399857	36,69100189
Azerbaijan	43.16500092	41.00999832	39.31600189	38.22999954	36.36000061	36.34999847	35,86999893
Bangladesh	66.01300049	64.80699921	51.2859993	47.30599976	43.43500137	40.59700012	38,57699966
Brunei Darussalam	1.582000017	1.230999947	0.93599999	0.694999993	0.740999997	1.35800004	1,363000035
Guyana	29.07799911	24.61100006	21.57500076	20.26499939	19.08799934	18.68000031	17,13699913
Indonesia	43.98400116	45.27999878	43.99499893	39.12799835	33.04399872	30.79000092	28,63500023
Iran, Islamic Rep.	23.82099915	24.06800079	24.75	19.22200012	18.0340004	17.58399963	17,9489994
Kazakhstan	36.875	35.76699829	32.40999985	28.28300095	18.01199913	15.13099957	15,80200005
Kyrgyz Republic	47.18999863	53.07500076	38.5	32.16899872	29.30999947	26.64599991	21,17200089
Malaysia	19.96999931	18.36199951	14.64099979	14.21899986	12.47200012	11.23200035	10,36100006
Maldives	19.34000015	18.33600044	16.46699905	12.7510004	9.760000229	9.109000206	8,470000267
Pakistan	43.1969986	42.67599869	43.06700134	43.38899994	41.00999832	41.96900177	36,6609993
Suriname	7.287000179	6.631999969	8.328000069	7.778999805	7.272999763	7.131999969	7,518000126
Tajikistan	58.76800156	57.93600082	55.375	52.97499847	51.75	51.2820015	44,92100143
Turkey	43.39099884	38.79600143	26.51000023	23.70400047	20.40600014	19.38400078	18,37599945
Turkmenistan	26.72900009	25.89100075	25.05699921	24.15800095	23.27799988	22.94300079	19,88299942
Uzbekistan	38.56800079	36.71300125	36.1590004	34.96300125	33.88800049	33.51900101	23,92399979
Asian Group	36.62638891	36.13950014	32.50700014	29.45322216	26.55011102	25.59355568	23,67494449
OIC Mean	42.04001581	41.23889697	38.87339741	36.29330331	33.94558672	33.56012032	30,34205271
World Total	41.34583081	40.06973801	37.11606862	33.20994732	29.18098022	28.41228474	26,85534673

Source: ILO Estimates

Annex 11: Agricultural Products Total Export Value, Thousand US Dollars Processed food and agro-based products

Area Name	2001	2005	2010	2015	2018
Benin	8560	42032	124999	45333	79288
Burkina Faso	12077	18866		22194	27035
Cameroon	27167	37790		80526	
Chad	1449	86	471	1083	
Côte d'Ivoire	277129	399327	563907		544742
Gabon	10901	34276	36814	13766	
Gambia	3135	2622	11317	12619	
Guinea	2786	3509	5581	4554	13428
Guinea-Bissau	0	16	0	0	76
Mali	1874	6333	16733		0
Mozambique	35797	60175	45200	221831	260550
Niger	31124	16139	24752	85832	682343
Nigeria	1974	0	364484	294698	252571
Senegal	165729	224891	321047	496265	590761
Sierra Leone	0	0	0	11317	49073
Togo	20539	48798	61961	114856	124930
Uganda	15889	50750	249847	378189	590862
African Group	616.130,000	945.610,000	1.929.833,000	2.329.287,000	3.373.507,000
Algeria	6084	27943		278014	181239
Bahrain	31740	46197	288255	427023	556746
Comoros	181	189	2435	3034	14724
Djibouti	0	0	2325	1872	
Egypt	254513	585518	2421893	2346596	
Iraq	0	0	0	5313	11927
Jordan	172388	359151	425187	485711	449155
Kuwait	50488	0	200663		429484
Lebanon	75553	183184	346516	541261	452623
Libya	0	0	687	6512	1260
Mauritania	905	5917	126521		433712
Morocco	915360	1291610	1777136	2534035	3038864
Oman	569381	371183	699771	1152246	1406671
Palestine	0	0	87992	149175	164933
Qatar	1266	7531	23595	24070	3569
Saudi Arabia	301077	907509	2325413	3216016	3066131
Somalia	7135	5932	598		16093
Sudan	0	0	0	157272	121091
Syrian Arab Republic	113280	295574		1170513	97807
Tunisia	339394	828662	881909	1609496	1556528
United Arab Emirates	0	1729713	0	5291808	9770314
Yemen	0	85942	173888	95584	115584
Arab Group	2.838.745	6.731.755	11.233.311	19.205.359	24.958.518
Afghanistan	0	0	4141	2,820	8212
Albania	10014	26214	43120	59292	39235
Azerbaijan	23117	129680	396946	426728	103271
Bangladesh	10867	41296		75023	626516
Brunei Darussalam	715	1673	2099	5156	7487
Indonesia	2686745	6866204		20241023	26486214
Iran	232019	427555	1504619	2078418	2612871
Kazakhstan	65900	318733		809477	
Kyrgyzstan	11415	42318	60480		79289
Malaysia	4553875	8493799	20977692	19234313	19483900
Maldives	26503	33193		20383	
Pakistan	0	1518229	2743686	3085180	3107634
Tajikistan	0	0	0	2550	4219
Turkey	1733324	3786975	5917961	9460015	10207879
Turkmenistan	982	1539	16807	72743	16054
Uzbekistan	0	0	0	0	162694
Guyana	148402	224203	302187	403079	295560
Suriname	15569	59377	31324		41690
Asian Group	9519447	21970988	53.146.968	63.048.657	68.677.702
OIC Total	12974322	29648353	66310112	84583302,82	97009727
World	247,575,736	389,022,580	634,269,232	764,940,660	890,382,264

Source: TRADEMAP

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

Area Name	2001	2005	2010	2015	2018	2019
Benin	75064		198749	614765	699820	1349012
Burkina Faso	97307	192805	257368	349,145	450822	368030
Cameroon	210245	363738	621599	780230	715555	826054
Chad	22086	41421	125562	122204	79155	95269
Côte d'Ivoire	299501		498834	914666	1071020	1380480
Gabon	123854	178303	276139	375551	336058	311960
Gambia	49449	82921	89738	128736	132345	147951
Guinea	127018	243744	292493	481191	802684	687413
Guinea-Bissau	0	56192	0	0	126066	128557
Mali	119045	209264	413036	0	519715	511476
Mozambique	94308	236402	282237	625079		686787
Niger	158882	222916	292498	471982		696376
Nigeria	911015	0	2802595	3431923	2182354	2668706
Senegal	343434		769077		804680	933240
Sierra Leone	0	0	0	359141		286795
Togo	40817	60422		132002		221392
Uganda	98720	183142	454031	550265	633363	371745
African Group	2770745	3537930	8308409	10252123,15	11840548	11153647
Algeria	1320788	1790730	3595333	4851417	4443155	4083874
Bahrain	309022	421133	753059	1241259	1205795	977556
Comoros	9088	17957		53225	62975	
Djibouti	0	0	423516	656580	887052	661233
Egypt	954060	1152,616	3288707	4633665	4639826	4328305
Iraq	0	0	0	6589960		8722185
Jordan	437905	794254	1398282	1939341	1940127	1943728
Kuwait	675657	0	1953266	2863858	3063876	2474414
Lebanon	713874	809321	1581144	1908735		1917677
Libya	0	0	946367	2188807	2226169	2129126
Mauritania	56850	108382	217180	318440	311148	381448
Morocco	546926	894738		1926310	2077848	2855465
Oman	993464	739364		1720992	2472579	2578136
Palestine	0	0	603612	989823	1347226	274384
Qatar	235360	419795	1111762	1796855	1788595	1589190
Saudi Arabia	2578133	4550159	8744534	12652449		11486296
Somalia	93453	230824	356374	899659	1299143	1495309
Sudan	0	0	0	1410602	1093447	1030822
Syrian Arab Republic	1490011	759988	2223575	1193757	1464249	1425842
Tunisia	316734	558821	855940	834073	939256	833672
United Arab Emirates	0	3234123	0	9025865	10657794	10050882
Yemen	0	770863	1632363	1708029	1961667	2420738
Arab Group	10731325	16101604,62	33385541	62316576	66896242	61237276
Afghanistan	0	0	649567	1231947	1632533	1613978
Albania	165320	276033	519567	386106	301228	582964
Azerbaijan	93196	258646	785465	856226	1044749	1084223
Bangladesh	842147	1184131	3706,554	5042566	3909428	3284296
Brunei Darussalam	129908		195370	317474	364375	340545
Indonesia	1798569	2859872	6218576	7653654	10211272	8713971
Iran (Islamic Republic of)	1074873		1875744		4951068	3540070
Kazakhstan	414471	1010824		1571140	2152886	
Kyrgyzstan	39807		127291	354243	404323	
Malaysia	2102022	3148015		7489030		9267656
Maldives	60263	80822	156977	264004	311360	243907
Pakistan	0	1580940	3238023	2982347	2949834	2642209
Tajikistan	0	0	0	446755	352153	439203
Turkey	821355	2024214	3333095	5272096	4926935	4843441
Turkmenistan	66323	98969	342225	433789	255728	201132
Uzbekistan	0	0	0	0	1054269	1198663
Guyana	71361	92535	157408	198808	209891	245403
Suriname	42278	68022	171106	148818	123977	145346
Asian Group	7721893	14881428	30258670,55	40646426	44599925	43240613
OIC Total	21223963	34520962,62	71952620,55	113215125,1	123336715	115631536
World	256,352,171	404,735,092	637,519,903	769,067,684	893,879,779	876,512,559

Source: TRADEMAP

Annex 13: Agricultural Products Trade Balance, Thousand US Dollars

Area Name	2001	2005	2010	2015	2018	2019
Benin	-66504	-156717	-489766	-654,487	-1269724	-824746
Burkina Faso	-85230	-173939	-235174	-322110	-408001	-317227
Cameroon	-183078	-325948	-541073	-703063	-675565	-793082
Chad	-20637	-41335		-125091	-121121	-79002
Côte d'Ivoire	-22372	-99507		-350759	-526278	-759362
Gabon	-112953	-144027	-239325	-361785	-324933	-302964
Gambia	-46314	-80299		-78421	-116117	-129881
Guinea	-124232	-240235	-221912	-476637	-789256	-677691
Guinea-Bissau	0	-56176	0	0	-125990	-128508
Mali	-117171	-202931		-396303	0	-507761
Mozambique	-58511		-176227	-237037	-403248	-426237
Niger	-127758	-206777	-267746	-386150	-14033	-356460
Nigeria	-909041	0	-2438111	-3137225	-1929783	-2437557
Senegal	-177705	-544186	-483633	-436975	-599760	-479015
Sierra Leone	0	0	0	-347824	-237722	-285050
Togo	-20278	-11624	-70041	-106536	-147530	-155279
Uganda	-82831	-132392	-204184		-172076	-42501
African Group	-2154615	-2592320	-6378576	-7617799,487	-8467041	-8857206
Algeria	-1314704	-1762787	-3317319	-4670178	-4223301	-3855613
Bahrain	-277282	-374936	-464804	-814236	-649049	-637652
Comoros	-8907	-17768	-50790	-59941	-53234	-51288
Djibouti	0	0	-421191	-654708	-885647	-660486
Egypt	-699547	-567098	-866814	-2287069	-1964512	-1423782
Iraq	0	0	0	-6584647	-8710258	-6063450
Jordan	-265517	-435103	-973095		-1453630	
Kuwait	-625169	0	-1752603	-2,434,374	-2634880	-2198076
Lebanon	-638321	-626137	-1234628	-1367474	-1465054	-1270601
Libya	0	0	-945680	-2182295	-2224909	-2127405
Mauritania	-55945	-102465	-90659	115272	362779	336994
Morocco	368434	396872	-149174	456187	183399	110127
Oman	-424083	-368181	-1021221	-1320333	-1171465	-2034112
Palestine	0	0	-515620	-840648	-1182293	-245482
Qatar	-234094	-412264	-1088167	-1772785	-1785026	-1584926
Saudi Arabia	-2277056	-3642650	-6419121	-9436433	-8420165	-8860862
Somalia	-86318		-224892	-355776		-883566
Sudan	0	0	0	-1253330	-972356	-897561
Syrian Arab Republic	-1,376731	-464414	-1053062	-1095950	-1269202	-1251157
Tunisia	22660	269841	25969	775423	617272	305709
United Arab Emirates	0	-1504410		0	-3734057	-887480
Yemen	0	-684921	-1458475	-1612445	-1846083	-2351590
Arab Group	-6515850,377	-10521313	-22152230	-40676843	-41937724	-37739819
Afghanistan	0	0	-645426	-1207127	-1624321	1590366
Albania	-155306	-249819	-476447	-326814	-261993	-450122
Azerbaijan	-70079	-128966	-388519	-429498	-941478	-953717
Bangladesh	-831280	-1142835	-3631531	-4416050	-3238562	-2551945
Brunei Darussalam	-129193	-193697	-315375	-359219	-333058	
Indonesia	888176	4006332		14022447		18832560
Iran (Islamic Republic of)	-842854		-1448189	-3446449	-1461652	-1821442
Kazakhstan	-348571	-692091	-761663		-1190869	-1178564
Kyrgyzstan	-28392	-84973	-293763	-325034	-326590	-345630
Malaysia	2451853	5345784	13488662	9966657	9649101	9434624
Maldives	-33760	-47629	-136594	-238550	-261851	-202920
Pakistan	0	-62711	-494337	102833	157800	609052
Tajikistan	0	0	0	-444205		-347934
Turkey	911969	1762761	2584866	4187919		5280944
Turkmenistan	-65341	-97430	-325418	-361046	-239674	-196500
Uzbekistan	0	0	0	0	-891575	-944277
Guyana	77041	131668	144779	204271	85669	8231
Suriname	-26709	-8645	-139782	-107128	-104245	-77960
Asian Group	1797554	7089560	19185450	22427048	24077777	23077286
OIC Total	-6872911,377	-6024073	-9345356	-25867594,49	-26326988	-23519739
World	-8,776,435	-15,712,486	-3,249,574	-4,169,567	-3,495,379	-7,089,152

Source: TRADEMAP

Annex 14: The First 15 Products & Partners in OIC's Exports, Thousand US Dollars

	2016	2017		2016	2017
African Group	12,990,271	13,679,190	African Group	12,990,271	13,679,190
Netherlands	1,903,393	2,239,564	Cocoa and cocoa preparations	5,816,729	7,011,465
France	683,946	1,186,585	Edible fruit and nuts	1,761,900	1,931,595
United States of America	1,141,812	1,078,834	Coffee, tea, maté and spices	649,220	864,110
Belgium	971,880	1,010,740	Fish and crustaceans etc.	662,630	678,349
India	677,139	795,184	Oil seeds	528,275	607,478
Germany	657,598	692,881	Tobacco and manufactured tobacco substitutes	602,371	492,388
Spain	367,380	461,340	Animal or vegetable fats and oils	533,846	314,209
Italy	344,660	447,402	Edible vegetables and certain roots and tubers	197,212	237,249
Kenya	317,986	440,312	Cereals	349,629	224,590
United Kingdom	347,013	411,092	Miscellaneous edible preparations	258,222	215,634
Turkey	246,375	368,102	Preparations of meat, of fish	167,561	162,823
China	269,231	358,584	Residues & waste; prepared animal fodder	93,944	150,312
Malaysia	389,290	316,626	Sugars and sugar confectionery	220,525	142,058
Sudan	58,004	287,876	Beverages, spirits and vinegar	170,885	132,450
Indonesia	88,074	237,228	Dairy produce; birds' eggs; natural honey	273,680	126,211
Share of Group's First 15, %	65.2	75.5	Share of Group's First 15, %	94.6	97.2
Arab Group	30,108,327	28,032,286	Arab Group	30,108,327	28,032,286
Saudi Arabia	3,127,191	3,913,078	Edible fruit and nuts; peel of citrus fruit or melons	3,809,847	3,527,591
Oman	1,551,679	1,985,453	Edible vegetables and certain roots and tubers	3,020,878	3,134,208
Spain	1,506,926	1,952,212	Fish and crustaceans etc.	2,604,732	2,946,226
United Arab Emirates	2,105,642	1,678,237	Dairy produce; birds' eggs; natural honey	2,615,475	2,511,978
Kuwait	1,261,418	1,512,412	Animal or vegetable fats and oils	1,906,119	1,937,512
France	1,259,475	1,502,724	Sugars and sugar confectionery	2,194,223	1,719,645
Jordan	875,102	980,624	Preparations of vegetables, fruit, nuts or other parts of plants	1,720,661	1,532,803
Italy	832,918	851,176	Preparations of cereals, flour, starch or milk	1,326,672	1,345,744
Russian Federation	561,001	701,076	Live animals	1,439,622	1,230,176
Qatar	975,763	654,030	Preparations of meat, of fish or of crustaceans	1,028,173	1,071,773
Netherlands	567,424	626,060	Miscellaneous edible preparations	1,343,793	1,064,068
Iraq	1,289,996	604,914	Oil seeds	1,028,996	1,035,070
India	479,112	604,182	Tobacco and manufactured tobacco substitutes	1,573,700	802,372
United States of America	511,046	511,897	Coffee, tea, maté and spices	749,898	789,495
China	305,169	505,779	Residues and waste; prepared animal fodder	680,018	659,652
Share of Group's First 15, %	57.2	66.3	Share of Group's First 15, %	89.8	90.3
Asian Group	84,610,516	88,438,649	Asian Group	84,610,516	88,438,649
India	6,211,178	7,469,272	Animal or vegetable fats and oils	32,075,836	37,672,845
China	6,540,352	7,094,211	Edible fruit and nuts	8,415,588	7,736,573
United States of America	5,378,358	5,953,292	Fish and crustaceans etc.	5,769,288	6,097,769
Netherlands	3,122,923	3,480,810	Preparations of cereals, flour, starch	4,108,943	4,180,154
Singapore	3,367,853	3,323,424	Miscellaneous edible preparations	3,184,267	3,138,230
Iraq	5,323,671	3,138,348	Cocoa and cocoa preparations	3,257,705	2,991,610
Russian Federation	2,244,674	2,945,577	Cereals	2,979,390	2,954,820
Pakistan	2,615,987	2,619,496	Tobacco and manufactured tobacco substitutes	2,647,758	2,608,926
Japan	2,142,700	2,308,951	Coffee, tea, maté and spices	2,755,334	2,591,720
Germany	2,450,886	2,306,286	Preparations of vegetables, fruit, nuts	2,866,070	2,530,003
Italy	2,151,520	2,261,014	Edible vegetables and certain roots & tubers	2,674,899	2,462,789
Philippines	1,780,085	2,155,969	Products of the milling industry	2,221,015	2,024,037
Viet Nam	2,417,092	2,131,589	Sugars and sugar confectionery	1,617,218	1,880,230
Malaysia	1,922,561	1,944,839	Beverages, spirits and vinegar	1,739,917	1,856,343
Spain	1,281,251	1,654,246	Dairy produce; birds' eggs; natural honey	2,124,397	1,657,427
Share of Group's First 15, %	57.9	57.4	Share of Group's First 15, %	92.7	93.2
First 15 Total	74,624,734	79,703,528		117,767,061	120,982,710
OIC	127,709,114	130,150,125		127,709,114	130,150,125
World	1,424,336,910	1,522,034,328		1,424,336,910	1,522,034,328

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

Annex 15: The First 15 Products & Partners in OIC's Imports, Thousand US Dollars

	2016	2017		2016	2017
African Group	14,772,300	16,491,425	African Group	14,772,300	16,491,425
India	1,232,546	1,388,479	Cereals	4,867,614	5,758,639
France	1,329,975	1,331,530	Fish and crustaceans etc.	1,588,237	1,481,211
Thailand	1,255,339	1,289,749	Sugars and sugar confectionery	1,287,745	1,407,731
Brazil	1,207,644	1,083,713	Animal or vegetable fats and oils	1,180,063	1,378,903
United States of America	709,929	888,942	Preparations of cereals, flour, starch	737,652	1,171,473
China	572,353	885,005	Dairy produce; birds' eggs; natural honey	823,452	924,438
Netherlands	713,030	854,978	Miscellaneous edible preparations	748,510	803,866
Russian Federation	496,901	609,847	Beverages, spirits and vinegar	631,135	692,465
Malaysia	450,715	535,433	Tobacco and manufactured tobacco substitutes	553,170	498,878
Indonesia	396,279	503,869	Products of the milling industry	490,303	441,645
South Africa	514,955	456,066	Meat and edible meat offal	449,232	436,649
Germany	317,064	381,541	Preparations of vegetables, fruit, nuts	255,866	287,260
Argentina	173,263	364,497	Edible vegetables and certain roots & tubers	324,141	277,716
Senegal	355,941	357,204	Residues and waste; prepared animal fodder	240,716	243,287
Canada	331,786	340,257	Coffee, tea, maté and spices	153,552	177,850
Share of Group's First 15,%	68.1	68.3	Share of Group's First 15,%	97.0	96.9
Arab Group	107,451,593	104,163,739	Arab Group	107,451,593	104,163,739
Brazil	8,165,261	10,147,562	Dairy produce; birds' eggs; natural honey	17,681,266	18,869,255
India	7,245,855	7,492,885	Meat and edible meat offal	9,792,134	9,160,884
Turkey	6,445,247	6,339,045	Sugars and sugar confectionery	8,386,066	8,355,382
United States of America	5,546,977	6,072,063	Animal or vegetable fats and oils	6,287,776	7,549,394
Argentina	4,674,104	5,279,363	Edible fruit and nuts	6,475,962	7,114,191
France	4,755,324	4,296,475	Preparations of cereals, flour, starch	7,264,396	6,045,420
Russian Federation	2,475,909	4,044,482	Edible vegetables and certain roots and tubers	5,883,475	5,135,932
United Arab Emirates	5,999,008	3,557,739	Miscellaneous edible preparations	5,485,436	4,767,007
Ukraine	3,187,389	3,520,725	Tobacco and manufactured tobacco substitutes	4,979,733	4,552,326
Netherlands	2,676,751	3,024,854	Coffee, tea, maté and spices	4,958,052	4,267,118
Saudi Arabia	3,248,342	3,024,500	Oil seeds and oleaginous fruits; miscellaneous grains	4,136,558	4,225,768
Egypt	3,059,464	2,621,705	Residues and waste ; prepared animal fodder	3,608,636	3,809,097
Germany	2,976,521	2,576,396	Preparations of vegetables, fruit, nuts	4,045,803	3,586,659
Australia	2,380,998	2,427,655	Live animals	4,001,513	3,199,546
Spain	2,398,771	2,383,377	Beverages, spirits and vinegar	3,227,008	2,893,671
Share of Group's First 15,%	60.7	64.1	Share of Group's First 15,%	89.5	89.8
Asian Group	73,894,492	80,123,166	Asian Group	73,894,492	80,123,166
Brazil	5,736,333	7,381,875	Cereals	11,004,878	12,028,527
United States of America	5,201,552	6,192,224	Animal or vegetable fats and oils	8,735,162	9,440,650
Russian Federation	5,282,940	5,991,371	Oil seeds and oleaginous fruits; miscellaneous grains	6,608,449	7,297,416
China	4,707,916	5,236,611	Residues and waste; prepared animal fodder	6,386,799	6,906,784
Indonesia	4,192,575	4,883,034	Sugars and sugar confectionery	5,450,453	6,261,061
Australia	4,171,193	4,740,449	Edible vegetables and certain roots and tubers	4,406,524	4,453,268
India	3,244,761	4,283,843	Edible fruit and nuts	4,026,355	4,173,882
Argentina	3,738,488	3,935,567	Dairy produce; birds' eggs; natural honey	3,034,012	3,388,033
Thailand	3,062,728	3,591,316	Miscellaneous edible preparations	3,149,639	3,376,184
Ukraine	2,731,759	3,021,395	Meat and edible meat offal	2,320,128	2,918,219
Malaysia	2,613,743	2,936,095	Cocoa and cocoa preparations	2,705,664	2,853,401
Canada	2,351,437	2,022,446	Coffee, tea, maté and spices	2,506,828	2,711,040
Kazakhstan	1,530,522	1,670,228	Tobacco and manufactured tobacco substitutes	2,420,142	2,507,680
New Zealand	1,359,714	1,574,563	Preparations of cereals, flour, starch	2,134,517	2,374,010
Netherlands	1,501,610	1,281,711	Live animals	1,549,230	2,072,894
Share of Group's First 15,%	69.6	73.3	Share of Group's First 15,%	89.9	90.8
First 15 Total	126,720,912	136,822,664		176,983,982	182,276,710
OIC	196,118,385	200,778,330		196,118,385	200,778,330
World	1,430,402,615	1,545,144,397		1,430,402,615	1,545,144,397

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

Annex 16: Land Use in the OIC Member Countries (2019)- Area 1000 Ha

Country Name	Land Area	Agricultural Area	Arable Land	Permanent Crops	Permanent Meadows
Benin	11276	3950	2800	600	550
Burkina Faso	27360	12100	6000	100	6000
Cameroon	47271	9750	6200	1550	2000
Chad	125920	50238	5200	38	45000
Cote d'Ivoire	31800	21200	3500	4500	13200
Gabon	25767	2212,64	325	170	1717,64
Gambia, The	1012	605	440	5	160
Guinea	24572	14500	3100	700	10700
Guinea-Bissau	2812	815,11	300	250	265,11
Mali	122019	41201	6411	150	34640
Mozambique	78638	41413,832	5650	300	35463,832
Niger	126670	46600	17700	118	28782
Nigeria	91077	69123,45	34000	6500	28623,45
Senegal	19253	8878	3200	78	5600
Sierra Leone	7218	3949	1584	165	2200
Togo	5439	3820	2650	170	1000
Uganda	20052	14415	6900	2200	5315
Arab Group	768156	344771,032	105960	17594	221217,032
Algeria	238174,10	41358,85	7505,02	1012,00	32841,83
Bahrain	78,30	8,60	1,60	3,00	4,00
Comoros	186,10	131,00	66,00	50,00	15,00
Djibouti	2318,00	1702,00	2,00	0,00	1700,00
Egypt, Arab Rep.	99545,00	3835,97	2910,97	925,00	0,00
Iraq	43412,80	9250,00	5000,00	250,00	4000,00
Jordan	8879,40	1030,28	208,62	79,66	742,00
Kuwait	1782,00	150,00	8,00	6,00	136,00
Lebanon	1023,00	658,00	132,00	126,00	400,00
Libya	175954,00	15350,00	1720,00	330,00	13300,00
Mauritania	103070,00	39661,00	400,00	11,00	39250,00
Morocco	44630,00	29611,91	6898,96	1712,94	21000,00
Oman	30950,00	1461,40	77,84	32,55	1351,00
Palestine	602,00	462,00	87,00	98,00	277,00
Qatar	1149,00	67,00	14,00	3,00	50,00
Saudi Arabia	214969,00	173598,00	3441,00	157,00	170000,00
Somalia	62734,00	44125,00	1100,00	25,00	43000,00
Sudan	184923,37	68186,16	19823,16	168,00	48195,00
Syrian Arab Republic	18363,00	13921,00	4662,00	1071,00	8188,00
Tunisia	15536,00	9743,00	2607,00	2386,00	4750,00
United Arab Emirates	7102,00	390,40	49,90	40,60	300,00
Yemen, Rep.	52797,00	23452,00	1158,00	294,00	22000,00
African Group	1308178	478153,5674	57873	8781	411500
Afghanistan	65223	38010	7788	222	30000
Albania	2740	1174	610	86	478
Azerbaijan	8265,4	4779,8	2096,1	260,3	2423,4
Bangladesh	13017	9397	7967	830	600
Brunei Darussalam	527	13,4	4	6	3,4
Guyana	19685	1241,25	420	40	781,25
Indonesia	187751,9	62300	26300	25000	11000
Iran, Islamic Rep.	162876	47013	15645	1891	29477
Kazakhstan	269970	214453,2	29857,2	132	184464
Kyrgyz Republic	19180	10368,4	1287,4	76,6	9004,4
Malaysia	32855	8571	826	7460	285
Maldives	30	6,4	3,9	1,5	1
Pakistan	77088	36300	30507	793	5000
Suriname	15600	84	62	6	16
Tajikistan	13879	4727,7	699,9	152,8	3875
Turkey	76963	37716	19580	3519	14617
Turkmenistan	46993	33838	1940	60	31838
Uzbekistan	44055,5	25555,3	4033,5	403,8	21118
Asian Group	1056698,8	535548	149627	40940	344981
OIC Member Countries Total	3133032,872	1358473,049	313460,0712	67314,7562	977698,312
World Total	13030087	4752111	1383346	170236	3196030

Source: FAOSTAT

Annex 17: Cereals Total Production, Tonnes

Country Name	1995	2000	2005	2010	2015	2019
Benin	734332	993383	1151853	1333436	1643227	2134806
Burkina Faso	2307988	2279247	3649533	4560546	4189665	4939630
Cameroon	1179858	1275031	1873821	3011835	3605513	3945682
Chad	907316	930038	1824463	3247583	2452528	2925292
Cote d'Ivoire	1321407	1285904	1424903	1961771	3308600	3139575
Gabon	29452	26900	35309	40754	45415	49115
Gambia, The	98755	176100	205572	363549	206609	104852
Guinea	1351036	1800810	2290039	2861146	3532856	4286357
Guinea-Bissau	200531	177884	212538	256353	208495	238549
Mali	2188973	2310196	3398743	5338937	8055052	10451442
Mozambique	1126331	1587548	1142170	2802582	1503910	2782012
Niger	2246328	2126435	3667114	5264113	5464509	5338986
Nigeria	22512600	21370000	26031000	24650298	25451761	28243317
Senegal	1186701	1025921	1432831	1767822	2152246	2768798
Sierra Leone	407600	222472	824691	1144650	987060	1085499
Togo	591264	740520	833289	1045866	1249728	1372361
Uganda	2030000	2112000	2526000	3270391	3720394	3461687
Arab Group	40420472	40440389	52523869	62921632	67777568	77267960
Algeria	2139705	934656	3527824	4211355	3761230	5633513
Bahrain						
Comoros	20912	18981	22250	29214	36500	42689
Djibouti	10	11	9	14	18	21
Egypt, Arab Rep.	16097252	20105573	22423470	19464743	23141275	24125510
Iraq	2540110	904480	3708150	4362383	3471116	6913550
Jordan	98821	57133	102406	87266	95323	114218
Kuwait	1961	7996	10078	20303	9312	17863
Lebanon	100385	122800	177240	111784	180116	165443
Libya	146511	221780	233600	243539	254600	219613
Mauritania	221643	179687	170771	278473	315852	480433
Morocco	1783230	1996649	4279354	7834479	11687923	5312976
Oman	32949	33163	32858	46034	78950	65375
Palestine	65775	67842	68378	26980	50142	50635
Qatar	4256	7215	7094	2665	1801	1011
Saudi Arabia	2668863	2167394	3006637	1565155	1549853	1344892
Somalia	284920	392408	355709	355815	265481	184185
Sudan	3305200	3259000	6243000	3562350	4088600	5630000
Syrian Arab Republic	6094151	3512791	5631256	3900866	3967943	6359475
Tunisia	647471	1121989	2135246	1113434	1339798	2419826
United Arab Emirates	4972	4037	2157	5336	3695	6708
Yemen, Rep.	810177	672237	562230	1012945	459246	456714
African Group	37069274	35787822	52699717	48235133	54758774	59544650
Afghanistan	3242179	1940000	5425000	5957000	5808288	5583461
Albania	645400	565800	511200	693800	695000	666065
Azerbaijan	909592	1496225	2056186	1928779	2898559	3416765
Bangladesh	27704115	39503000	41146756	51862850	55438379	59181920
Brunei Darussalam	508	299	851	1072	1983	1500
Guyana	529300	452569	424365	560532	691784	1054000
Indonesia	57990042	61575000	66674990	77610636	80643435	85297388
Iran, Islamic Rep.	17191142	12877642	21914453	19597232	18255385	23812431
Kazakhstan	9476320	11539396	13750260	12115916	18585932	17355885
Kyrgyz Republic	911080	1550090	1621549	1510268	1753400	1822892
Malaysia	2170271	2205800	2389000	2512432	2803864	2965976
Maldives	11	100	120	164	197	223
Pakistan	25036450	30460700	33507800	34811258	41081682	43260318
Suriname	216323	163695	163990	226721	268529	274408
Tajikistan	242350	544994	902912	1382559	1324045	1336388
Turkey	28168560	32240094	36464200	32764875	38632438	34398698
Turkmenistan	1102050	1751000	3035000	1535230	1617000	1689357
Uzbekistan	3382600	4107900	6534570	7473500	8014002	6992495
Asian Group	178918293	202974304	236523202	252544824	278513902	289110170
OIC Total	256408039	279202515	341746788	363701589	401050244	425922780
World Total	1899400863	2058541782	2266634969	2460450169	2833553469	2978982008

Source: FAOSTAT

Annex 18: Oilcrops Primary Production, Tonnes

Country Name	1995	2000	2005	2010	2015	2019
Benin	657210	730989	676512	856101	1185346	1996911
Burkina Faso	417767	459218	1039931	1047829	1444917	1686808
Cameroon	1379725	1573936	2187327	3018111	3159131	3136057
Chad	474581	588242	748711	1302291	1166328	1459634
Cote d'Ivoire	2024516	1876090	1867775	2021070	2614378	2714393
Gabon	54918	53800	51398	43387	54882	58471
Gambia, The	112534	176338	144657	175566	140351	146899
Guinea	972582	1118466	1173957	1241284	1433903	1909809
Guinea-Bissau	132400	150152	154954	163827	171024	176378
Mali	714273	588699	955636	715760	1151962	1407478
Mozambique	655995	673590	745413	677206	575479	595215
Niger	127526	138494	199729	528761	505120	694294
Nigeria	10797820	12895596	14234729	14013749	14177959	16957523
Senegal	899633	1154089	856754	1444241	1226216	1612664
Sierra Leone	267295	194304	320130	300068	299694	372482
Togo	297292	282321	238995	264586	298249	348293
Uganda	401300	547947	814773	822038	824072	746616
Arab Group	20387367	23202271	26411381	28635875	30429011	36019925
Algeria	165751	250126	348889	340085	681119	904442
Bahrain						
Comoros	71405	74910	81542	92994	73757	87956
djibouti						
Egypt, Arab Rep.	1162149	1145126	1220240	1104679	1340260	1729314
Iraq	111039	75890	114231	91427	50563	43039
Jordan	63274	134503	113167	171790	200937	214994
Kuwait	1	1	15	29	57	80
Lebanon	63615	197320	82260	208141	140925	140977
Libya	183000	185000	207118	199144	179522	153240
Mauritania	5367	5186	3512	3570	3543	3405
Morocco	463629	462080	819237	1619112	1235167	1985802
Oman						
Palestine	44889	157485	88366	112863	88845	91075
Qatar						
Saudi Arabia	6050	7393	8964	6664	5738	5628
Somalia	42761	41316	54896	51320	60252	62761
Sudan	1503000	1483000	1221006	1177250	1649700	4439211
Syrian Arab Republic	1081615	1992439	1686181	1467833	725135	1009116
Tunisia	319007	571841	1069265	890745	1714416	889506
United Arab Emirates						
Yemen, Rep.	26398	45987	39936	52472	38156	45741
African Group	5312950	6829603	7158825	7590118	8188092	11806287
Afghanistan	118605	106066	97712	73745	92879	170579
Albania	40860	40640	33930	73841	99320	100615
Azerbaijan	275129	106319	228746	73009	76211	352698
Bangladesh	520365	436340	758120	829769	991655	1035436
Brunei Darussalam	142	169	358	358	416	429
Guyana	75600	81900	71861	18511	91196	117252
Indonesia	39714944	54217124	94721539	165476047	202608628	264144825
Iran, Islamic Rep.	773278	783241	990647	672682	717055	830457
Kazakhstan	385045	456630	942630	1017560	1821383	2932298
Kyrgyz Republic	93976	141238	205711	134860	93246	89292
Malaysia	43337258	57466669	75522700	83811653	99041766	99807815
Maldives	11880	15670	17035	4260	508	272
Pakistan	5906621	6174848	7298898	6676790	5919029	5728934
Suriname	15946	9896	6415	10012	13923	15232
Tajikistan	411855	336478	456577	323845	293555	438884
Turkey	3842640	5019382	4575158	5261680	5978498	6390412
Turkmenistan	1293000	1030000	1000000	1286300	763650	582000
Uzbekistan	3960539	3027908	3763938	3508220	3459139	2802571
Asian Group	100777683	129450518	190691975	269253142	322062057	385540001
OIC Total	126478000	159482392	224262181	305479135	360679160	433366213
World Total	433449728	514419812	672947872	833884835	980715104	1101306633

Source: FAOSTAT

Annex 19: Fruit Primary, Total Production, Tonnes

Country Name	1995	2000	2005	2010	2015	2019
Benin	180622	194030	266373	433526	434252	565153
Burkina Faso	75091	78429	83084	94191	106100	115213
Cameroon	2457273	2056413	3285742	4950551	6400201	6723718
Chad	109191	113206	112658	117267	123110	126089
Cote d'Ivoire	2047054	2347112	2282068	2170545	2453543	2579083
Gabon	258464	294357	294178	337491	372490	399155
Gambia, The	4474	5866	6998	8429	9679	10626
Guinea	979346	1009558	1121152	1204624	1289288	1328496
Guinea-Bissau	69033	75343	83455	95944	109065	118793
Mali	448484	534481	621510	1672759	1295168	1996758
Mozambique	336700	290768	398986	646767	1019695	1098214
Niger	48147	138204	281800	512205	554222	709340
Nigeria	7928578	9389796	9671111	10762880	11506523	11961707
Senegal	365350	241863	387487	436900	550875	1484050
Sierra Leone	156465	170536	209725	237309	266544	286741
Togo	44571	48445	52700	59900	66541	71939
Uganda	9644958	10090650	9709084	5349200	4921893	4025120
Arab Group	25153801	27079057	28868111	29090488	31479189	33600195
Algeria	1547190	1802532	3092650	4447608	6235744	7069957
Bahrain	21608	22098	18336	20154	22987	22170
Comoros	59019	62615	68700	61690	49815	26685
Djibouti	3207	3612	3714	4152	4553	4853
Egypt, Arab Rep.	7454444	9551830	11021298	12313121	15395048	15524952
Iraq	2507211	2587286	1702996	1543569	1109403	1922723
Jordan	347007	307769	412745	475795	589532	540524
Kuwait	7355	13205	25074	37734	104812	115324
Lebanon	1434760	924200	1004810	852574	1053911	999775
Libya	574029	555929	598403	648862	668487	679536
Mauritania	35414	27000	25426	25773	27970	28758
Morocco	2337929	3318374	3852567	4297236	5642885	6381574
Oman	262530	359353	324012	382421	416832	510473
Palestine	293123	251151	194167	94317	102937	105911
Qatar	18529	23143	22841	24634	28890	28896
Saudi Arabia	1636138	1569073	2161661	2155020	2051296	3195046
Somalia	223383	208821	213484	207780	209967	208355
Sudan	1047720	1451856	3141295	3200650	3618376	3317366
Syrian Arab Republic	1762444	2134338	2455080	2753720	2354139	2598744
Tunisia	1049564	1379832	1590270	1704534	2168329	2120183
United Arab Emirates	296452	975152	792199	858950	435844	360598
Yemen, Rep.	527603	775267	938314	1253538	1112288	1158422
African Group	23446659	28304436	33660042	37363832	43404045	46920825
Afghanistan	789515	856631	936922	1360110	1831103	3078485
Albania	288825	391651	455290	634378	765329	810756
Azerbaijan	725912	788471	1092698	1250376	1479608	1668323
Bangladesh	1487405	1440000	3099030	3917826	4516921	4896712
Brunei Darussalam	4956	5214	6155	6587	7354	8306
Guyana	66544	75359	53584	56826	109759	167066
Indonesia	10866450	8710401	15261368	15634651	20732093	21453166
Iran, Islamic Rep.	11701699	13813313	19320716	17829472	19031448	17459251
Kazakhstan	328395	685090	986130	1352656	2369052	2770911
Kyrgyz Republic	110300	253472	243954	354893	463484	471700
Malaysia	1303694	1333937	1322137	1202850	1328908	1113984
Maldives	11730	9560	10497	6790	4326	5504
Pakistan	5957952	5902443	6941856	9668754	9795029	9572590
Suriname	93086	76219	89202	131553	116835	98899
Tajikistan	361100	375462	413330	835343	1136857	1299516
Turkey	14975475	16629300	18450775	19229237	20296003	23312940
Turkmenistan	394000	482000	661000	662759	654741	676411
Uzbekistan	1715887	1866500	2207180	3880000	6178943	5798029
Asian Group	51182925	53695023	71551824	78015061	90817793	94662549
OIC Total	99783385	109078516	134079977	144469381	165701027	175183569
World Total	467462896	572527129	652862918	736945275	835741275	883415750

Source: FAOSTAT

Annex 20: Vegetables Primary, Total Production, Tonnes

Country Name	1995	2000	2005	2010	2015	2019
Benin	266366	278679	329507	302253	630671	672552
Burkina Faso	241289	239035	242982	270529	308499	318480
Cameroon	687552	1212461	1465602	2039598	2726840	3107164
Chad	100852	96448	98334	102303	108054	112108
Cote d'Ivoire	603258	582913	664897	642608	703186	713829
Gabon	32966	35389	37432	42855	49748	55578
Gambia, The	8000	9000	10405	11359	12786	13513
Guinea	502311	499745	561343	563516	552794	563887
Guinea-Bissau	23500	25129	26387	32155	39188	44618
Mali	869853	884555	1002632	1209889	1570431	2085285
Mozambique	147630	115282	250868	449650	699010	1176489
Niger	346845	529608	842654	869446	2275658	3065790
Nigeria	5898594	8277564	11115881	12090852	16187140	16670642
Senegal	77620	259124	290591	509147	741852	998362
Sierra Leone	187000	182000	264000	306136	353974	388274
Togo	144793	136894	141273	143688	146455	148708
Uganda	475940	546286	760777	1087032	1412799	1672086
Arab Group	10614369	13910112	18105565	20673016	28519085	31807365
Algeria	2246286	1783773	3011333	4116878	5985283	7295378
Bahrain	12164	10542	7950	15324	15597	18332
Comoros	5919	6420	4277	5019	5336	5773
Djibouti	21893	24651	26940	31337	36044	39979
Egypt, Arab Rep.	8797644	12568379	14406872	16773785	16396416	15419841
Iraq	2372200	2677500	3197596	3059473	1106412	1271660
Jordan	803660	799222	1251424	1412842	1690762	1212016
Kuwait	111945	186116	261355	334009	296352	328459
Lebanon	981410	813400	726200	879599	754543	729868
Libya	531388	652790	605487	652469	677741	693356
Mauritania	3524	3815	4000	4410	4649	4749
Morocco	1907076	2537034	3598847	4379584	4213408	4205557
Oman	164400	176833	177428	302928	385066	668619
Palestine	505086	553392	594746	435421	290637	476361
Qatar	42389	50980	18391	41347	34955	62308
Saudi Arabia	1734080	1166071	1392971	1271985	648299	638690
Somalia	49932	61862	81159	96252	103858	111128
Sudan	1414750	1949050	2568004	2637446	3276697	3868750
Syrian Arab Republic	1594250	1529933	2120399	2368171	1720418	2020519
Tunisia	1258131	1709785	1825263	2541536	3140932	3142885
United Arab Emirates	696766	2124839	431560	188242	239443	315098
Yemen, Rep.	375945	476797	496939	646029	482325	478214
African Group	25630838	31863184	36809141	42194086	41505173	43007540
Afghanistan	1171983	1108694	1243836	969763	1008465	1377857
Albania	399500	376537	451000	604559	748746	942293
Azerbaijan	77214	765901	1165164	1223024	1276769	1716198
Bangladesh	1390105	1723000	2471290	3472597	5058058	6300864
Brunei Darussalam	9329	13807	12422	10455	10640	6159
Guyana	24545	74720	31946	73224	179085	234526
Indonesia	6562565	6579705	7838948	9398266	10237085	11772048
Iran, Islamic Rep.	5868943	8463955	11241607	14006099	13669831	11827191
Kazakhstan	779750	1487510	2207723	2577467	3565397	4274274
Kyrgyz Republic	318713	747042	736873	812302	1052290	1104539
Malaysia	403488	398846	521872	847992	1359632	1286212
Maldives	3103	2989	2460	2510	2675	2725
Pakistan	3565876	4427637	4715230	4608150	4784710	5462905
Suriname	23782	19159	18935	13179	24142	23172
Tajikistan	495876	368335	755761	1180989	1778034	2346678
Turkey	16471951	18841662	20628962	20655850	23696207	25338974
Turkmenistan	376000	347200	549500	664781	659198	670026
Uzbekistan	2725000	2645100	3517760	6347100	10129923	9984635
Asian Group	40667723	48391799	58111289	67468307	79240887	84671276
OIC Total	76912930	94165095	113025995	130335409	149265145	159486181
World Total	512369002	681990855	779336964	921119136	1056813178	1127926636

Source: FAOSTAT

Annex 21: Beef and Buffalo Meat Production, Tonnes

Country Name	1995	2000	2005	2010	2015	2018
Benin	15400	25653	29971	34085	38760	41854
Burkina Faso	62146	68615	111745	123374	94973	110130
Cameroon	73000	93000	94000	81910	96526	84268
Chad	136560	176760	228960	296520	384022	443952
Cote d'Ivoire	36990	33232	29612	34264	31384	33107
Gabon	1016	1115	1571	1135	1191	1164
Gambia	3342	3469	3936	4080	4701	4326
Guinea	28590	34395	41022	61600	80000	83783
Guinea-Bissau	3982	4510	5247	6353	6961	7444
Mali	54080	56312	107679	143676	160000	188715
Mozambique	13500	12000	6148	8103	12303	13884
Niger	62000	47549	58522	60357	58942	58560
Nigeria	266861	279000	305610	306960	384396	390214
Senegal	43750	46157	47196	61079	83794	82569
Sierra Leone	7004	6489	7210	10094	13200	13409
Togo	5578	6620	8200	9250	10234	10632
Uganda	86400	96750	147000	180300	214210	238729
African Group	900199	991626	1233629	1423140	1675597	1806740
Algeria	100600	132600	120000	126126	155037	153192
Bahrain	684	896	875	1020	986	986
Comoros	1005	1012	1100	1243	1271	1282
Djibouti	3278	6050	5170	6050	6193	6414
Egypt	533000	570000	707000	855653	837384	721203
Iraq	43337	47775	48080	55786	56824	43570
Jordan	3900	6500	7530	12299	27452	28280
Kuwait	602	806	728	2004	1882	1936
Lebanon	17685	57600	61467	45764	46163	43193
Libya	21600	8200	7600	13400	9180	9801
Mauritania	9600	21000	25200	25787	30320	30176
Morocco	122100	140000	157000	192000	245514	283002
Oman	3454	3936	4810	14950	13888	14738
Palestine	10670	13921	5228	5810	8290	8286
Qatar	246	540	300	576	647	581
Saudi Arabia	26000	21600	22400	44000	40800	42023
Somalia	49500	61600	67650	59180	60387	58690
Sudan	224750	296000	350000	343000	366752	388987
Syrian Arab Republic	33910	47255	55411	62215	65591	65590
Tunisia	43700	52000	45800	55800	58300	60291
United Arab Emirates	10875	15325	7050	15000	16163	19917
Yemen, Rep.	40634	51698	72627	107512	114743	117617
Arab Group	1301130	1556314	1773026	2045175	2163767	2099755
Afghanistan	130000	126000	141100	131000	136428	129691
Albania	30800	35900	40800	40800	38556	38544
Azerbaijan	54951	78425	95909	112361	129753	135620
Bangladesh	151216	176500	188000	194112	202102	205684
Brunei Darussalam	1251	3358	2213	824	606	718
Guyana	3800	1900	2028	2260	2282	2197
Indonesia	359462	385795	396757	472364	542071	563161
Iran	264920	289000	363000	362351	331440	463378
Kazakhstan	548200	306300	348300	406817	416823	477407
Kyrgyz Republic	84700	100622	90850	97712	99059	108631
Malaysia	16919	17501	29396	46510	50494	51301
Maldives						
Pakistan	847000	886000	1004000	1485000	1750000	1934000
Suriname	1800	1952	1338	1882	1474	1616
Tajikistan	32000	14800	26700	28642	37794	39560
Turkey	298545	358683	323258	621971	1015251	1004261
Turkmenistan	51000	72000	103000	140004	143305	144223
Uzbekistan	392000	390000	518100	665300	850000	922364
Asian Group	3268564	3244736	3674749	4809910	5747438	6222356
OIC Total	5469893	5792676	6681404	8278225	9586802	10128851
World Total	55374837	58850260	62420785	66553535	67979125	71601312

Source: FAOSTAT

Annex 22: Meat, Poultry Production, Tonnes

Country Name	1995	2000	2005	2010	2015	2018
Benin	10800	13853	13255	10335	13245	14561
Burkina Faso	22470	26469	30882	37280	38179	47484
Cameroon	21200	21200	53200	68000	76224	78807
Chad	4828	5307	5586	5985	6121	6454
Cote d'Ivoire	24180	22088	22521	34899	42837	44199
Gabon	3200	3760	3760	3760	3963	3911
Gambia	1100	960	975	1200	1575	1632
Guinea	2955	4176	5570	7771	11103	12690
Guinea-Bissau	798	1357	1684	2035	2599	2621
Mali	25600	29200	34400	41600	43776	51046
Mozambique	30474	32850	20753	41994	77574	88781
Niger	10120	10976	11708	16400	17594	19109
Nigeria	169000	160000	218750	245000	197580	192689
Senegal	17460	23239	29042	45451	60118	64146
Sierra Leone	8673	5484	4873	14014	16621	16547
Togo	7360	12000	17600	28400	34205	35557
Uganda	36400	44090	52650	62300	62516	69548
African Group	396618	417009	527209	666424	705830	749782
Algeria	208365	244020	270360	274820	291480	294663
Bahrain	5031	5777	5050	6260	6661	6956
Comoros	464	512	560	568	577	601
Djibouti						
Egypt	389773	591762	664636	851133	1166521	1199783
Iraq	37000	74000	85000	52812	86000	90225
Jordan	107740	119043	133165	187724	181997	193586
Kuwait	25899	32964	37821	37831	53293	61122
Lebanon	58000	105000	122400	80000	100751	125821
Libya	102800	98540	98800	118800	120706	128782
Mauritania	3840	4080	4440	4464	3826	4715
Morocco	197000	267000	388000	612500	714954	774973
Oman	3880	4320	5840	5944	6270	6561
Palestine	48560	73873	69090	43580	54319	61356
Qatar	3817	4209	5308	8120	8527	10004
Saudi Arabia	310000	483700	537700	575684	518348	554332
Somalia	3120	3200	3680	3520	3831	3841
Sudan	25000	26000	30500	38000	60000	70000
Syrian Arab Republic	88864	110190	165275	192000	101145	101072
Tunisia	70460	116870	132000	160700	219600	216746
United Arab Emirates	22470	27312	33600	40800	46390	48200
Yemen	47156	66734	113195	144103	176763	179768
Arab Group	1759239	2459106	2906420	3439363	3921959	4133107
Afghanistan	12320	13200	32320	28000	23968	28850
Albania	3900	4000	9000	17000	12905	15587
Azerbaijan	14300	17188	34664	64470	97211	109121
Bangladesh	117481	129900	168000	203200	235500	254433
Brunei Darussalam	4241	11904	15635	20910	23552	25300
Guyana	7318	11800	22699	24900	30678	46322
Indonesia	875700	817740	1147060	1565600	2065738	2588164
Iran	649850	814700	1248700	1677825	2038159	2198994
Kazakhstan	53000	33300	45700	102979	136924	183236
Kyrgyz Republic	2662	4643	5381	4064	7997	8315
Malaysia	706737	714270	964000	1263563	1633408	1873037
Maldives						
Pakistan	312550	331680	388680	711940	1078941	1396127
Suriname	4120	4250	8143	11984	9476	10877
Tajikistan	600	100	200	1054	1600	1733
Turkey	298203	668333	983462	1478803	1964640	2229096
Turkmenistan	4000	6000	14000	19500	20390	21567
Uzbekistan	16000	16000	21300	27000	52000	64731
Asian Group	3082982	3599008	5108944	7222792	9433087	11055490
OIC Total	5238839	6475123	8542573	11328579	14060876	15938379
World Total	55295722	68638943	81323150	99296537	116259109	127298325

Source: FAOSTAT

Annex 23: Sheep and Goat Meat Production, Tonnes

Country Name	1995	2000	2005	2010	2015	2019
Benin	5765	6432	7165	8177	9042	9657
Burkina Faso	33568	38913	44577	51676	51597	46827
Cameroon	27718	31900	32080	36609	28276	33539
Chad	58692	82470	116058	163614	231026	284425
Cote d'Ivoire	10785	10391	11703	12020	11560	12187
Gabon	900	960	1219	1004	1141	1135
Gambia	839	688	1405	1540	1322	1297
Guinea	5772	7878	10963	15412	20522	24571
Guinea-Bissau	1430	1598	1716	2348	2472	2666
Mali	45023	65675	83215	118435	134953	167059
Mozambique	18144	25380	25188	20160	24876	24846
Niger	52884	31330	33481	37049	45143	47994
Nigeria	222227	336624	394048	458155	393663	390708
Senegal	23159	23632	28239	33379	40244	47721
Sierra Leone	1330	1138	1446	3505	3937	3856
Togo	3268	7104	9540	10781	10503	10318
Uganda	25772	29920	36840	42691	44651	51213
African Group	537276	702033	838883	1016555	1054928	1160019
Algeria	178450	176350	191283	221418	330401	343639
Bahrain	8995	7101	10920	16740	16870	16358
Comoros	434	433	453	474	481	482
Djibouti	4405	4534	4547	4534	4626	4604
Egypt	116000	124000	138000	128122	125249	117499
Iraq	30554	31080	30956	53600	56066	55307
Jordan	12000	13468	15317	17168	21547	21656
Kuwait	38171	34355	44770	37106	46556	43091
Lebanon	10518	8546	10972	13550	10869	10529
Libya	36376	30150	36600	44925	45062	46823
Mauritania	21165	34200	39300	43800	54688	54668
Morocco	132000	147000	137000	162000	185430	210888
Oman	16625	17650	27550	34740	40739	47884
Palestine	15320	15679	27397	14795	15281	14677
Qatar	10118	6494	8856	10720	11419	11558
Saudi Arabia	87536	98200	105500	98300	117097	121034
Somalia	57200	67600	92300	81900	84204	78869
Sudan	236913	383000	470000	476000	369000	383000
Syrian Arab Republic	136570	188770	186969	166125	175100	175100
Tunisia	54000	63200	64000	59400	59400	58649
United Arab Emirates	50700	38420	25900	45100	58229	64663
Yemen	37990	46840	46345	69330	127624	124670
Arab Group	1292040	1537070	1714935	1799847	1955938	2005648
Afghanistan	133600	169700	133500	157200	153770	160533
Albania	18300	19500	20900	21000	26251	31434
Azerbaijan	23000	34984	41894	74280	70940	80800
Bangladesh	107000	131600	158400	194996	212450	228057
Brunei Darussalam	50	39	66	69	65	60
Guyana	780	780	780	820	834	837
Indonesia	94283	78300	97931	113658	109473	115533
Iran	376800	435666	432000	371515	429213	413681
Kazakhstan	205800	95100	106600	142944	165102	170553
Kyrgyz Republic	54100	43105	46374	50432	70965	71856
Malaysia	671	888	1460	2387	4407	3154
Maldives						
Pakistan	683000	467000	532000	434000	483000	516000
Suriname	52	43	35	33	18	20
Tajikistan	11300	12900	26900	39240	54100	62738
Turkey	372000	374000	315000	273900	404077	432437
Turkmenistan	49500	70500	96500	120008	144219	142887
Uzbekistan	83000	79400	73600	100000	191200	171442
Asian Group	2213236	2013505	2083940	2096482	2520084	2602022
OIC Total	4042552	4252608	4637758	4912884	5530950	5767689
World Total	10563474	11620199	12828021	13690948	15106114	15765334

Source: FAOSTAT

Annex 24 Total Fisheries Production, Metric Tons

Area Name	1995	2000	2005	2010	2015
Benin	44,379	32,324	31,847	40,155	37,747
Burkina Faso	8,000	8,505	9,065	14,800	21,030
Cameroon	94,188	112,159	142,747	181,570	225,955
Chad	90,000	83,200	77,000	91,030	100,154
Côte d'Ivoire	70,575	81,520	43,531	56,937	68,000
Gabon	40,476	48,384	43,941	32,822	33,045
Gambia	23,699	29,021	34,960	46,649	56,003
Guinea	67,864	91,513	109,238	113,689	126,250
Guinea-Bissau	6,328	6,315	6,983	6,584	6,700
Mali	133,000	109,900	101,008	102,083	94,880
Mozambique	27,411	41,530	85,778	163,419	287,720
Niger	3,651	16,265	50,058	40,070	27,300
Nigeria	366,101	467,095	579,537	817,516	1,027,058
Senegal	366,372	436,109	399,902	409,795	426,650
Sierra Leone	64,895	74,760	143,023	200,075	202,175
Togo	12,221	22,297	27,756	27,635	21,555
Uganda	208,983	220,176	427,575	508,805	513,795
African Group	1628,143	1881,073	2313,949	2853,634	2248,959
Algeria	106,248	113,511	126,628	95,223	97,279
Bahrain	9,393	11,730	11,858	13,493	15,006
Comoros	13,109	12,003	10,738	63,447	12,674
Djibouti	350	800	1,571	1,590	2,012
Egypt	407,117	724,408	889,302	1,304,795	1,518,944
Iraq	30,808	22,512	43,949	39,668	52,099
Jordan	595	1,119	1,071	1,027	1,758
Kuwait	8,706	7,354	5,222	6,683	4,549
Lebanon	4,385	4,066	4,611	4,580	4,663
Libya	34,448	50,009	37,783	50,116	26,012
Mauritania	56,147	114,456	304,877	276,238	403,776
Morocco	858,884	916,713	1,041,467	1,144,394	1,371,281
Oman	139,861	120,421	157,544	164,054	257,192
Palestine	1,229	2,623	1,824	1,979	3,503
Qatar	4,271	7,140	13,946	13,796	15,213
Saudi Arabia	48,388	55,084	74,796	91,519	98,130
Somalia	32,400	24,150	25,000	30,000	30,000
Sudan	45,003	54,010	60,608	73,358	74,528
Syrian Arab Republic	11,639	13,369	16,980	15,247	6,600
Tunisia	84,216	96,224	111,756	98,603	133,442
United Arab Emirates	105,884	105,456	87,325	79,808	73,790
Yemen	107,970	114,750	238,780	164,011	180,813
Arab Group	3055,106	3371,108	2226,169	1284,44	1493,039
Afghanistan	1,600	1,300	1,450	2,050	2,150
Albania	1,720	3,635	6,473	7,636	9,473
Azerbaijan	11,061	18,937	9,501	2,081	1,129
Bangladesh	1,109,462	1,661,384	2,215,957	3,035,101	3,684,245
Brunei Darussalam	4,822	2,600	3,163	2,851	4,353
Indonesia	4,388,520	5,152,262	6,827,210	11,700,000	22,400,000
Iran (Islamic Republic of)	368,297	424,541	522,328	663,684	983,897
Kazakhstan	50,350	37,433	37,744	47,051	41,191
Kyrgyzstan	392	110	46	379	1,099
Malaysia	1,249,960	1,461,223	1,434,097	2,018,700	2,003,019
Maldives	104,754	119,373	186,274	122,804	127,352
Pakistan	540,697	626,554	515,472	594,566	644,659
Tajikistan	384	253	193	1,207	1,626
Turkey	652,585	582,383	546,063	653,646	670,873
Turkmenistan	11,409	12,296	15,026	15,026	15,030
Uzbekistan	13,808	8,958	6,700	10,732	59,852
Guyana	48,130	49,492	53,978	45,676	36,976
Suriname	14,301	24,583	29,862	35,156	44,827
Asian Group	2599,534	2275,085	2173,034	2583,166	2644,487
OIC	7282,783	7527,266	6713,152	6721,24	6386,485
World	124928828,2	136488432,5	151518162	166876013,9	199741128,6

Source: World Development Indicator

Annex 25: Capture Fisheries Production, Metric Tons

Country Name	1995	2000	2005	2010	2015	2016
Benin	44379	32324	31497	39791	36477	49806
Burkina Faso	8000	8500	9000	14520	20750	22070
Cameroon	94131	112109	142345	181000	224000	233190
Chad	90000	83200	77000	91000	100000	110000
Cote d'Ivoire	70189	80323	42665	55237	64000	67500
Gabon	40437	47826	43863	32692	33000	31000
Gambia, The	23699	29016	34955	46624	55968	58261
Guinea	67860	91513	109138	113504	126000	128000
Guinea-Bissau	6328	6315	6983	6584	6700	6700
Mali	132900	109870	100000	100000	92480	102486
Mozambique	27375	41530	83996	162555	286587	299591
Niger	3616	16250	50018	40000	27000	34592
Nigeria	349482	441377	523182	616981	710331	734731
Senegal	366312	436005	399848	409715	425437	474162
Sierra Leone	64870	74730	142993	200000	202100	202100
Togo	12201	22277	27706	27535	21497	31891
Uganda	208789	219356	416758	413805	396205	389244
African Group	94739.29412	108971.8235	131879.2353	150090.7647	166384.2353	175019.0588
Algeria	105878.7	113159.9	126260.3	93464	95946	95000
Bahrain	9389	11718	11855	13490	15000	15000
Comoros	13109	12003	10738	63447	12674	16407
Djibouti	350	800	1571	1590	2012	2220
Egypt, Arab Rep.	335301.5	384315	349554	385210	344113	335614
Iraq	28208	20767	26008	19348	27296	28000
Jordan	425	550	510	486	873	873
Kuwait	8616	6978	4895	6373	4287	5493
Lebanon	4085	3666	3798	3400	3638	4291
Libya	34408	49969	37395	50006	26002	30002
Mauritania	56147	114456	304877	276238	403776	609754
Morocco	856811.8	914824.2	1039210	1143652	1370231	1454105
Oman	139861	120421	157326	163927	257022	279606
Palestine	1229	2623	1814	1699	3227	3306
Qatar	4271	7140	13935	13760	15203	14516
Saudi Arabia	45692	49080	60421	65145	68130	68082
Somalia	32400	24150	25000	30000	30000	30000
Sudan	44003	53010	59007.5	71358	33008	33002
Syrian Arab Republic	5782	6572	8447	6637	4100	4500
Tunisia	83255.72	94670.83	109153.3	93178.8	119017	115063.5
United Arab Emirates	105884	105456	86735	79610	73000	73000
Yemen, Rep.	107970	114750	238400	163861	180813	154450
Arab Group	91958.03273	100503.5877	121677.7318	124812.7182	140425.8182	153285.6591
Afghanistan	1300	1000	1000	1000	1000	1000
Albania	1380.3	3328	5000	5132.2	7877.5	7885.7
Azerbaijan	10545	18797	9001	1081	568	676
Bangladesh	792389	1004264	1333866	1726586	1623837	1674770
Brunei Darussalam	4719	2487	2709	2351	3370	13292
Guyana	47900	48887	53370	45188	36558	42142
Indonesia	3645428	4158535	4703117	5390461	6739658	6584419
Iran, Islamic Rep.	339661	383991	410567	443650	637779	695407
Kazakhstan	48402	36620	37621	46827	40461	41335
Kyrgyz Republic	185	52	26	27	31	89
Malaysia	1117215	1293325	1218263	1437457	1496054	1584371
Maldives	104754	119373	186274	122804	127352	129191
Pakistan	525849	614069	434850	454465	493485	513156
Suriname	14300	24238	29620	35085	44705	47013
Tajikistan	100	167	167	690	1176	1100
Turkey	630978	503352	426496	485925	431909	335326
Turkmenistan	9740	12228	15000	15000	15000	15000
Uzbekistan	3611	3306	2900	4078	22956	27267
Asian Group	405469.7944	457112.1667	492769.2778	567655.9556	651320.9167	650746.65
World Total	93696571.98	94763862.7	93697962.79	88855994	93736944.84	..

Source: World Development Indicator

Annex 26: Fish and Fisheries Apparent Consumption , Average 2011-2013

Area Name	Production Tonnes	Non-Food Uses Tonnes	Imports Tonnes	Exports Tonnes	Food Supply Tonnes	Per Capita Supply Kg/Year
Benin	39,248	0	95,007	1,323	132,933	13.2
Burkina Faso	18,736	0	96,028	3,091	111,673	6.8
Cameroon	137,730	0	213,964	2,862	348,832	16.1
Chad	60,000	0	842	104	60,738	4.9
Côte d'Ivoire	79,923	0	318,053	63,422	334,557	16.9
Gabon	34,101	1	23,818	774	57,144	35.0
Gambia	40,462	0	4,609	3,365	41,707	23.3
Guinea	115,020	0	3,093	10,281	107,831	9.4
Guinea-Bissau	6,550	0	780	4,679	2,690	1.6
Mali	94,664	7,047	24,954	1,024	111,547	9.3
Mozambique	210,204	0	38,617	13,244	235,576	9.3
Niger	53,258	0	3,261	1,962	54,557	3.2
Nigeria	926,442	0	1,417,370	51,005	2,355,307	14.0
Senegal	453,027	0	12,416	137,793	327,652	23.9
Sierra Leone	202,878	0	1,947	5,868	198,958	33.3
Togo	24,142	0	56,526	946	79,723	12.0
Uganda	514,661	0	2,336	47,878	469,120	12.9
African Group	3,011,046	7,048	2,313,621	349,621	5,030,545	13.0
Algeria	104,816	59	50,533	1,538	153,751	4.0
Bahrain	9,918	0	12,098	10,898	13,318	10.1
Comoros	38,218	27,750	1,575	0	12,043	16.8
Djibouti	1,845	0	1,173	12	3,007	3.5
Egypt	1,396,183	0	415,911	17,332	1,794,762	22.2
Iraq	64,954	0	42,399	224	107,129	3.3
Jordan	1,075	53	40,828	3,411	38,439	5.5
Kuwait	4,543	62	42,940	482	46,939	14.5
Lebanon	5,091	6	46,989	917	51,157	11.0
Libya	30,240	0	76,610	441	106,409	17.3
Mauritania	276,238	120,500	4,640	125,936	35,392	9.3
Morocco	1,126,118	196,070	61,694	451,848	540,509	16.6
Oman	158,723	16,500	33,221	98,970	81,474	24.7
Palestine	1,507	0	6,163	377	7,293	1.7
Qatar	12,131	256	36,843	2,600	47,031	23.0
Saudi Arabia	88,934	161	302,157	33,362	357,568	12.6
Somalia	30,000	0	2,532	1,365	31,167	3.1
Sudan	35,980	0	0	0	35,980	1.0
Syrian Arab Republic	11,233	0	49,528	57	60,706	2.8
Tunisia	117,418	12	61,858	34,384	145,647	13.4
United Arab Emirates	75,562	41,667	203,969	63,692	212,974	23.3
Yemen	157,411	11,000	23,742	120,053	60,100	2.5
Arab Group	3,748,138	414,096	1,517,403	967,899	3,942,795	10.8
Afghanistan	2,050	0	0	0	2,050	0.1
Albania	7,079	0	16,718	7,252	16,545	5.2
Azerbaijan	1,578	0	18,829	335	20,072	2.2
Bangladesh	3,256,571	28,337	25,170	89,582	3,172,822	20.5
Brunei Darussalam	4,196	653	14,993	1,195	17,344	42.0
Indonesia	9,074,260	548,668	214,271	1,309,662	7,430,252	30.1
Iran (Islamic Republic of)	819,663	77,011	58,041	67,232	733,494	9.6
Kazakhstan	43,250	0	81,270	36,806	87,713	5.4
Kyrgyzstan	422	1	12,387	1	12,807	2.3
Malaysia	1,666,075	205,944	481,217	349,733	1,603,615	54.9
Maldives	94,953	0	2,156	53,064	54,446	161.0
Pakistan	594,935	84,243	2,879	163,183	350,387	2.0
Tajikistan	1,380	0	2,685	0	4,065	0.5
Turkey	652,298	144,485	80,822	121,302	467,330	6.3
Turkmenistan	15,027	0	4,159	0	19,186	3.7
Uzbekistan	10,767	1	10,258	356	20,669	0.7
Guyana	45,674	2	1,699	22,471	24,900	31.3
Suriname	34,456	6,500	2,663	21,741	8,878	16.6
Asian Group	16,324,634	1,095,845	1,030,217	2,243,915	14,046,575	16.2
OIC	23,083,818	1,516,989	4,861,241	3,561,435	23,019,915	14.2
World	158,626,897	22,146,370	44,569,832	44,325,338	137,158,497	19.4

Source: FAOSTAT-AQUASTAT

Annex 27: Agricultural Land Productivity (Agr. GDP at 2010 constant prices /Arable Land)

(US Dollars/ha.)

Country Name	1995	2000	2005	2010	2015	2018
Benin	465,0670123	460,8740361	502,1680407	623,9250921	632,3283837	1353,988273
Burkina Faso	420,4483879	513,0768143	490,5638745	487,017366	550,2943472	
Cameroon	363,1691584	457,9861419	536,4855575	593,1972118	754,9694602	860,8539065
Chad				1230,269231	1337,97023	1272,083456
Cote d'Ivoire				2104,836679	2733,336931	2364,638009
Gabon	1529,331055	1712,327935	1927,292006	1729,416114	2297,852665	3154,366837
Gambia	701,5863351	676,1269071	645,7216677	612,3855644	428,2407045	811,1719386
Guinea	233,8040369	379,3848315	355,5207563	413,2156348	503,8460155	632,6737545
Guinea-Bissau		994,9489	1251,120468	1276,06706	1394,85741	1474,318477
Mali	549,9648451	446,95822	460,4947865	563,134413	667,9417046	785,7311098
Mozambique	293,1512277	345,7823136	391,6728848	491,4274322	568,8257958	680,8191326
Niger				154,8881062	170,7090339	259,3464976
Nigeria	804,3557995	920,2614988	1758,91147	2630,913212	3121,684555	3433,205882
Senegal	510,0004079	528,9441445	592,7898263	675,8106521	851,2340756	1081,612514
Sierra Leone	1292,196295	1929,893086	672,5598286	863,6379952	1020,154076	1155,295751
Togo	378,32227	395,4562932	558,0220562	400,2612252	486,1087253	534,9748743
Uganda	699,2140743	754,3573821	821,6530287	784,5979009	852,3504387	1492,999104
African Group	485,2370818	561,959937	877,1783939	1270,087794	1490,473846	1651,746946
Algeria		916,1499789	1342,026698	1819,391329	2572,515981	27613,77289
Bahrain				47839,09491	54321,80732	59757,31375
Comoros	2810,500446	3302,488215	3700,735185	4244,645938	4423,372769	4735,021788
Djibouti						
Egypt, Arab Rep.	6233,281756	7475,971486	9646,827591	10164,0669	11781,50112	12729,04145
Iraq	1376,091328	1765,205549	1801,419825	1787,656496	1074,285285	461,0327434
Jordan	2327,517425	2460,9404	4003,811676	6258,020849	5001,307234	6357,609975
Kuwait				52128,4019	76090,93812	77852,4075
Lebanon	6422,436444	10697,52497	9927,898746	12965,3344	11454,17239	14138,10105
Libya						
Mauritania	1437,454942	1337,228338	1743,088903	1956,178016	2203,134493	2723,80325
Morocco	532,4555633	689,276422	1032,066025	1561,012354	1872,155537	2068,086106
Oman	0	20369,98194	23778,56211	23632,00149	24531,89952	25146,0776
Palestine	5021,191045	5219,460284	3565,451828	11389,01582	7816,470846	4242,297621
Qatar	0	6580,087615	7331,486655	10744,89999	15168,42007	258,0875692
Saudi Arabia	2776,981902	311,3946442	3435,299055	4385,57652	4564,954827	4703,108889
Somalia						
Sudan					1000,459026	1256,737823
Syrian Arab Rep.						
Tunisia	672,8186925	998,2527514	1132,972897	1175,720249	1515,496212	1722,379102
United Arab Emr.				43723,1116	54946,60045	64515,5273
Yemen	909,3152376	1249,112014	1611,294706	1954,039478	1690,501518	1561,363783
Arab Group	1339,293073	1867,533578	2218,298692	2777,503083	2098,480118	2244,945973
Afghanistan			424,8358981	533,301566	551,12061	616,0334015
Albania	2536,024549	2581,388209	3199,98255	3421,064679	3995,013287	4184,771501
Azerbaijan	820,1994236	1011,617643	1411,805215	1556,831867	1859,14821	1920,321019
Bangladesh	1236,490691	1552,927689	1916,805771	2515,569877	3013,940881	3306,458296
Brunei Darussalam	28999,1565	40199,083	56513,2745	25119,1785	23322,3322	21770,429
Guyana	799,4341729	914,08096	942,3628952	1016,146519	1242,89159	955,463681
Indonesia	4033,10284	3650,176483	3818,297455	4456,723379	5483,650317	5468,403042
Iran	1258,0197	1621,318446	1911,409979	2056,956107	2721,685056	0
Kazakhstan	149,7277007	154,6425419	215,7741961	232,804477	276,7449224	308,7501485
Kyrgyz Republic	364,5685366	499,8177795	601,1505919	655,4864927	729,7524184	783,156764
Malaysia	19621,76625	22192,16683	23742,97782	30119,35133	35508,496	36181,21573
Maldives	39386,317	44761,17133	65771,00267	37389,98883	39633,91236	45632,37385
Pakistan	830,2601905	1030,299503	1179,132381	1405,346576	1542,864777	1634,07251
Suriname	5034,124474	5135,143579	6365,241653	7702,139764	7366,154015	9013,780726
Tajikistan	566,5182322	642,5855306	1021,33104	1478,019667	2092,587016	2543,36041
Turkey	2062,675564	2395,006003	2619,738341	3258,154136	4016,039279	4378,455717
Turkmenistan				1320,130222		
Uzbekistan	766,2602787	866,1318047	1190,931448	1623,37529	2208,555458	4819,766113
Asian Group	1370,964497	1574,323409	1843,0802	2200,585005	2618,359001	2557,962595
OIC Total	1094,588823	1288,070573	1566,062775	1948,200609	2139,833792	2192,740981
World Total	1095	1288	1566	1770	2052	2282,81554

Source: FAOSTAT

Annex 28: Agricultural Labor Productivity (2010 US Dollar Per Worker in Agriculture)

Country Name	2000	2005	2010	2015	2016	2017
Benin	848715,7273	930323,666	991969,0379	997888,0335	2186931,131	848715,7273
Burkina Faso	505117,7961	697916,2027	1078307,021	1842709,054	0	505117,7961
Cameroon	633552,4571	666596,5462	800292,1737	1032881,119	1167932,618	633552,4571
Chad	0	0	1798463,938	2018116,767	1536488,854	0
Cote d'Ivoire	0	0	1803896,912	2009093,4	2594323,485	0
Gabon	4822414,029	4799769,368	3774749,747	4214458,899	5815495,584	4822414,029
Gambia, The	1451806,242	1422776,557	1701071,014	1041027,129	1672018,804	1451806,242
Guinea	424148,3732	477921,7232	537896,284	643295,9837	772520,7001	424148,3732
Guinea-Bissau	891797,6397	924798,6579	894230,5976	860845,9643	829772,4464	891797,6397
Mali	713115,7431	851479,2057	996998,2358	1155501,84	1242743,807	713115,7431
Mozambique	202021,0362	266426,0151	356848,2666	396837,2389	433535,9924	202021,0362
Niger	0	0	466084,1776	525682,1925	766899,371	0
Nigeria	1661336,039	3131748,005	4104194,762	5508845,567	6186939,761	1661336,039
Senegal	1443483,487	1517907,108	2158595,006	2328957,799	2979187,452	1443483,487
Sierra Leone	850326,0613	735637,9345	1004693,574	1206543,76	1356313,927	850326,0613
Togo	965186,6972	1012569,186	788344,7671	987192,9819	1071941,41	965186,6972
Uganda	702122,1442	741193,0929	701889,3407	586053,0356	910672,2987	702122,1442
African Group	462094,3444	1355013,683	1904577,24	2251828,024	2422109,47	462094,3444
Algeria	5068626,715	6463586,104	11543533,28	17794189,61	19800922,94	5068626,715
Bahrain	0	0	9940591,323	10471673,93	9859818,262	0
Comoros	3111039,624	3079997,281	3138816,681	2918976,96	0	3111039,624
Djibouti	0	0	0	0	0	0
Egypt, Arab Rep.	3873940,158	3863856,714	4129035,406	5091517,6	0	3873940,158
Iraq	5334519,607	6255765,387	4895677,107	3273064,668	1464348,662	5334519,607
Jordan	9969694,602	15054982,94	18998710,11	16936075,61	0	9969694,602
Kuwait	0	0	13332072,11	12257326,56	12267003,73	0
Lebanon	6565084,305	5661099,485	6257612,711	5039835,853	7872407,34	6565084,305
Libya	0	0	0	0	0	0
Mauritania	1554101,998	1543239,401	1812394,704	1857965,746	1908403,176	1554101,998
Morocco	1620511,234	1950901,914	2844839,31	3823508,973	3885772,956	1620511,234
Oman	13266164,72	9338004,767	11816000,49	11476088,57	15940265,95	13266164,72
Palestine	6169002,889	3874640,305	5800699,301	5015568,768	0	6169002,889
Qatar	9832314,889	5486790,25	7161527,793	9669867,947	11899423,61	9832314,889
Saudi Arabia	3010846,735	38898565,81	35842028,61	20979315,7	50341005,6	3010846,735
Somalia	0	0	0	0	0	0
Sudan	3826468,461	3824838,682	4068843,206	5222864,084	5961372,377	3826468,461
Syrian Arab Republic	0	0	0	0	0	0
Tunisia	5083563,087	5640072,956	5585759,449	8947351,413	0	5083563,087
United Arab Emirates	0	0	10786881,43	18857159,51	29744011,59	0
Yemen, Rep.	1314809,961	1733748,254	2296881,514	1427529,532	0	1314809,961
Arab Group	3325058,443	3643909,897	4291447,897	5017028,336	3548121,754	3325058,443
Afghanistan	0	927353,2232	1196906,691	1117058,611	1251883,505	0
Albania	2580049,084	3348746,571	4773933,325	5537026,983	6078147,09	2580049,084
Azerbaijan	1446095,183	1804603,301	1829606,639	2143944,312	2493909,841	1446095,183
Bangladesh	445123,8093	590497,2179	750561,2286	895786,5806	1032095,678	445123,8093
Brunei Darussalam	44665648,04	70641593,33	83730595,28	83294043,69	39745894,25	44665648,04
Guyana	9812,29786	9637,559837	9992,84779	13272,78033	11073,01427	9812,29786
Indonesia	17982029,15	16636536,04	26325600,51	31681814,98	33584134,11	17982029,15
Iran, Islamic Rep.	9883003,098	13125660,9	13678082,65	25563335,95	0	9883003,098
Kazakhstan	4615448,722	7666385,731	9279761,533	11789734,78	18033637,53	4615448,722
Kyrgyz Republic	399359,4424	500504,0595	495751,9439	529339,0986	659178,3365	399359,4424
Malaysia	1140729917	1094263104	1237065455	1302467411	1289474594	1140729917
Maldives	7398,540725	9337,697058	5870,36179	5768,633403	0	7398,540725
Pakistan	41270482,1	41336769,63	42765723,6	47987609,18	50890582,94	41270482,1
Suriname	37179,51714	60892,37646	79320,24263	87772,68771	111564,0866	37179,51714
Tajikistan	1046504,065	1480274,933	2044238,482	2910801,301	0	1046504,065
Turkey	16784837,78	16630268,43	18595662,33	22866358,95	25928070,64	16784837,78
Turkmenistan	0	0	49062310,95	0	0	0
Uzbekistan	416767723,2	393992358,8	519241361,3	679555525,5	1330379698	416767723,2
Asian Group	2021010,554	2430441,492	2712943,996	3279253,601	3442217,363	2021010,554
OIC Total	1447859,108	2237546,027	2638698,602	3148413,771	3097415,682	1447859,108
World Total	1,865255579	2,148989119	2,554726121	3,208097982	3687182865	1,865255579

Source: World Development Indicator

Annex 29. Wheat Yield, Tonnes/Ha

Country Name	1995	2000	2005	2010	2015	2018
Benin	1.1737	1.1481	1.1447	1.1028	1.2813	1.3848
Burkina Faso						
Cameroon	1.3198	1.3362	1.3418	1.3846	1.3248	1.3273
Chad	0.9996	1.4336	1.5	2.5007	1.4006	2,244
Cote d'Ivoire						
Gabon						
Gambia, The						
Guinea						
Guinea-Bissau						
Mali	2.104	2.3515	2.2001	2.5543	3.9401	3,5419
Mozambique	1.1401	1	1.1071	1.3367	1.0787	1,1612
Niger	3.4444	2.0049	1.7443	1.9909	2.0664	2,9615
Nigeria	2.18	1.4038	1.1	1.4844	1	0,7895
Senegal						
Sierra Leone						
Togo						
Uganda	1.8	1.7143	1.6667	1.6667	1.5998	1,5383
African Group	0,83	0,73	0,69	0,82	0,81	0,88
Algeria	0,8924	0,9194	1,5057	1,4838	1,464	1,9076
Bahrain						
Comoros						
Djibouti						
Egypt, Arab Rep.	5.4221	6.3422	6.4929	5.5741	6.5919	6,6895
Iraq	0.8052	0.32	0.8738	1.9872	2.8617	2,7205
Jordan	1.4414	1.3971	1.1731	1.0307	0.9852	1,1451
Kuwait	3.3636	2.3856	4.8019	2.3478	3.75	3
Lebanon	2.4765	2.7025	2.903	2.7815	3.4771	3,3671
Libya	0.7313	0.7784	0.7576	0.7772	0.7838	0,7728
Mauritania	1.2893	1.5464	2	2.082	2.0143	2,1566
Morocco	0.5543	0.4758	1.0261	1.7095	2.4664	2,5752
Oman	2.3684	3.1896	3.1919	4.1264	2.9882	3,8525
Palestine	1.915	2.4656	2.0898	1.7892	1.9834	2,2168
Qatar	2.2969	2.3056	2.3333	2.25		2,5
Saudi Arabia	4.472	4.264	5.4175	6.1474	6.142	6,5334
Somalia	0.3708	0.3692	0.3871	0.3868	0.3955	0,3983
Sudan	1.6113	2.3266	2.4615	1.7935	3.4393	2,6327
Syrian Arab Republic	2.5457	1.8498	2.4523	1.928	2.0593	2
Tunisia	1.278	1.1727	1.6918	1.8923	1.3985	1,7711
United Arab Emirates	1.7419	6.5	2	5.9184	3.2967	3,324
Yemen, Rep.	1.6831	1.6246	1.3134	1.7843	1.6692	1,6349
Arab Group	1,69	1,95	2,04	2,17	2,17	2,33
Afghanistan	1,0895	0,724	1,8215	1,9252	2,1959	2,21
Albania	2,8703	3,0455	3,1582	3,9905	3,9511	3,6927
Azerbaijan	1,494	2,3223	2,5818	1,9381	3,0385	2,9383
Bangladesh	1,9483	2,2104	1,7478	2,3959	3,086	3,1301
Brunei Darussalam						
Guyana						
Indonesia						
Iran	1.7096	1.5856	2.0585	1.8337	2.0159	2,1642
Kazakhstan	0.5748	0.9028	0.948	0.7336	1.1882	1,2281
Kyrgyz Republic	1.7175	2.342	2.241	2.1674	2.3701	2,4268
Malaysia						
Maldives						
Pakistan	2.0811	2.4907	2.5858	2.5528	2.7256	2,8505
Suriname						
Tajikistan	0.8882	1.1839	1.9603	3.0159	3.032	3,0483
Turkey	1.9315	2.2928	2.3309	2.44	2.8803	2,744
Turkmenistan	1.5904	2.4143	3.1489	1.7	0.8727	1,0678
Uzbekistan	2.1421	2.7174	4.2073	4.6	4.8175	4,126
Asian Group	1,11	1,35	1,60	1,63	1,79	1,76
OIC Mean	1,213272876	1,342255239	1,444502248	1,541480768	1,588010665	1,65
World Total	2.5153	2.7218	2.8287	2.9716	3.3583	3.4254

Source: FAOSTAT

Annex 30: Maize Yield, Tonnes/Ha.

Country Name	1995	2000	2005	2010	2015	2018
Benin	1,1737	1,1481	1,1447	1,1028	1,2813	1,304
Burkina Faso	1,1441	1,7543	1,8058	1,4342	1,792	1,6681
Cameroon	1,545	2,4615	2,1334	1,9741	1,7406	1,7817
Chad	0.88	0.75	1.09	0.82	1.15	1,2809
Cote d'Ivoire	1.54	2.03	2.11	1.98	1.98	2,1262
Gabon	1.55	1.62	1.55	1.57	1.57	1,5706
Gambia	1.29	1.61	1.05	1.25	0.89	0,8854
Guinea	1.20	1.42	1.54	1.63	1.25	1,3386
Guinea-Bissau	1.00	0.99	1.08	1.05	1.05	1,0485
Mali	1.28	1.33	1.49	2.69	2.53	3,2114
Mozambique	0.68	0.94	0.50	1.20	0.80	0,9056
Niger	1.26	0.62	0.83	0.79	1.22	1,4632
Nigeria	1.27	1.30	1.66	1.85	1.56	0,8553
Senegal	1.09	1.11	2.80	1.54	1.53	1,4704
Sierra Leone	1.01	0.93	0.98	1.45	0.61	2,1438
Togo	0.86	1.20	1.16	1.19	1.39	1,2396
Uganda	1.60	1.74	1.59	2.30	2.35	2,6208
African Group	34	229412	1994118	3888235	582353	182353
Algeria	1,6115	3,6186	3,3864	2,5827	3,9242	1,8407
Bahrain						
Comoros	2.27	2.20	2.14	2.09	2.03	2,0211
Djibouti	1.67	1.83	1.50	1.85	1.90	2,1047
Egypt	6.16	7.68	8.16	7.27	7.35	7,801
Iraq	1.43	0.76	2.31	2.36	3.18	3,5245
Jordan	12.65	14.56	23.32	19.39	28.04	21,2206
Kuwait	18.60	20.56	19.73	19.73	8.47	17,5972
Lebanon	2.33	3.89	3.78	3.66	3.34	3,7859
Libya	1.37	2.89	2.40	1.93	2.32	2,2274
Mauritania	0.80	0.91	0.82	0.86	0.65	0,6886
Morocco	0.13	0.40	0.20	1.21	0.75	0,799
Oman	7.34	7.49	7.64	7.78	11.96	8,6033
Palestine						
Qatar	12.58	12.52	12.48	20.76	12.50	12,5235
Saudi Arabia	1.95	6.28	3.73	5.31	5.31	6,23
Somalia	0.83	1.46	1.18	1.51	0.56	1,4929
Sudan	0.57	0.74	1.00	1.32	1.24	1,2725
Syrian Arab Republic	3.60	3.44	3.68	3.51	3.18	3,0256
Tunisia						
United Arab Emirates	19.05	21.03	22.52	18.56	35.29	28,4664
Yemen	1.36	1.48	0.81	1.68	1.14	1,1546
Arab Group	5,0685	5,986242105	6,357178947	6,492773684	7,007063158	6,651552632
Afghanistan	1,6563	1,1979	1,2069	1,6448	2,1457	1,4727
Albania	3,13	3,8811	4,5442	6,679	6,9597	7,2273
Azerbaijan	1,181	3,2484	4,7703	4,5551	5,97	7,8177
Bangladesh	1,07	2,0597	5,3311	5,8378	6,9841	8,2104
Brunei Darussalam						
Guyana	1.33	1.24	1.25	1.37	1.37	1,371
Indonesia	2.26	2.76	3.45	4.44	5.18	5,3261
Iran	6.10	6.17	7.22	6.90	7.03	6,9588
Kazakhstan	1.93	3.34	4.15	4.83	5.33	5,7449
Kyrgyz Republic	3.21	5.75	6.06	6.06	6.27	6,5949
Malaysia	1.87	2.41	3.00	5.54	6.23	7,4594
Maldives	1.00	2.38	3.33	4.55	3.33	5,1004
Pakistan	1.69	1.71	2.98	3.81	4.42	4,7863
Suriname	2.26	1.90	1.84	2.33	2.34	2,5
Tajikistan	1.94	2.70	4.05	12.05	10.58	14,8868
Turkey	3.73	4.16	7.00	7.26	9.33	9,6358
Turkmenistan	3.47	0.97	0.94	1.70	1.37	1,2989
Uzbekistan	3.51	2.65	4.89	8.18	11.78	10,3776
Asian Group	2,431605882	2,854535294	3,883088235	5,160982353	5,6835	6,280529412
OIC Mean	2,899501961	3,39700227	3,8940871	4,390881424	4,714381837	4,838421465
World Total	3.81	4.32	4.82	5.19	5.52	5.9237

Source: FAOSTAT

Annex 31: Seed cotton Yield, Tonnes/Ha.

Country Name	1995	2000	2005	2010	2015	2018
Benin	1,3297	1,0645	0,9982	0,9991	0,8775	1,2633
Burkina Faso	1,0346	1,0164	1,1463	1,1444	1,3784	1,0186
Cameroon	1.03	1.03	1.36	1.31	1.11	1,0872
Chad	0.76	0.64	0.70	0.35	0.93	1.00
Cote d'Ivoire	1.03	1.38	1.12	0.93	1.12	0,8545
Gabon	..	..	..	..	..	..
Gambia	0.42	0.51	0.39	0.38	0.36	0,3482
Guinea	1.18	1.25	1.15	0.97	0.98	0,9328
Guinea-Bissau	1.21	1.24	1.31	1.40	1.075	1,1308
Mali	1.21	1.07	0.97	0.97	0.94	1,2979
Mozambique	0.60	0.33	0.47	0.48	0.41	0,5169
Niger	1.17	1,00	1,00	1,00	1,04	0,6979
Nigeria	0.58	0.74	0.79	1.51	0.69	0.91
Senegal	0.90	0.92	1.18	0.94	1.01	1,1153
Sierra Leone	..	..	..	..	..	..
Togo	1.06	0.83	0.79	0.71	0.72	0,7071
Uganda	0.33	0.30	0.57	1.04	1.12	1,37
African Group	0,814370588	0,783582353	0,820264706	0,831382353	0,809464706	0,838264706
Algeria	0,4988	0,4455	0,3923	0,31	0,3077	0,3077
Bahrain	..	..	..	..	..	..
Comoros	..	..	..	..	..	..
Djibouti	..	..	..	..	..	..
Egypt, Arab Rep.	2.14	2.54	2.04	24350	31632	2,2213
Iraq	1.22	1.67	1.07	22011	16724	1,9014
Jordan	..	..	..	..	..	..
Kuwait	..	..	..	..	..	..
Lebanon	..	..	..	..	..	..
Libya	..	..	..	..	..	..
Mauritania	..	..	..	..	..	..
Morocco	1.28	2.30	1.82	2.08	2.07	2,0899
Oman	..	..	..	..	..	..
Palestine	..	..	..	..	..	..
Qatar	..	..	..	..	..	..
Saudi Arabia	..	..	..	..	..	..
Somalia	0.41	0.40	0.40	0.40	0.4	0,4027
Sudan	1.41	0.86	1.56	1.2	1.53	1,9512
Syrian Arab Republic	2,9373	4,0027	4,2983	2,7404	0,6606	0,6268
Tunisia	1.76	1.36	1.12	0.87	0.66	0,5981
United Arab Emirates	..	..	..	..	..	..
Yemen, Rep.	0.96	1.04	1.17	1.26	1.07	1,087
Arab Group	0,573459091	0,664463636	0,630481818	0,613477273	0,524268182	0,508459091
Afghanistan	1,1333	1,14	1,1	1	1,1984	1
Albania	0,9667	0,9495	0,9537	1,001	1,1081	1,1081
Azerbaijan	1,3024	0,9144	1,7529	1,2665	1,8835	1,7628
Bangladesh	1,1685	2,5019	2,9789	3,0974	3,2979	3,6548
Brunei Darussalam	..	..	..	..	..	..
Guyana	..	..	..	..	..	..
Indonesia	0.36	0.33	0.37	0.31	0.12	0,0788
Iran	1.92	2.02	2.28	1.84	2.44	2,2818
Kazakhstan	2.078	1.89	2.31	1.79	2.76	2,5916
Kyrgyz Republic	2.25	2.60	2.61	2.79	3.09	3,2423
Malaysia	..	..	..	..	..	..
Maldives	..	..	..	..	..	..
Pakistan	1.80	1.87	2.04	2.09	1.68	2,0348
Suriname	..	..	..	..	..	..
Tajikistan	1.521	1.41	1.55	1.91	1.69	1,6163
Turkey	2.94	3.46	4.11	4.48	4.72	4,9553
Turkmenistan	2.13	1.79	1.67	2.34	1.04	1,1555
Uzbekistan	2.64	2.08	2.61	2.56	2.59	2,0691
Asian Group	1,233883333	1,275322222	1,463083333	1,470827778	1,534327778	1,530622222
OIC Mean	0,873904337	0,907789404	0,971276619	0,971895801	0,956020222	0,95911534
World Total	1.60	1.67	2.00	2.18	2.09	2.1909

Source: FAOSTAT

Annex 32: Renewable Water Potential 2014-2017

Area 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) 2014
Benin	26.39	7,132.43	1,039.00
Burkina Faso	13.50	1,118.48	748.00
Cameroon	283.10	29,035.90	1,604.00
Chad	45.70	915.24	322.00
Côte d'Ivoire	84.14	4,084.47	1,348.00
Gabon	166.00	32,170.54	1,831.00
Gambia	8.00	13,223.14	836.00
Guinea	226.00	15,694.44	1,651.00
Guinea-Bissau	31.40	19,263.80	1,577.00
Mali	120.00	2,881.08	282.00
Mozambique	217.10	4,346.35	1,032.00
Niger	34.05	760.35	151.00
Nigeria	286.20	3,975.00	1,150.00
Senegal	38.97	4,322.80	686.00
Sierra Leone	160.00	39,052.58	2,526.00
Togo	14.70	3,818.18	1,168.00
Uganda	60.10	4,214.00	1,180.00
African Group	1,815.35	5,078.55	19,131.00
Algeria	11.67	281.67	89.00
Bahrain	0.12	13,488.37	83.00
Comoros	1.20	7,594.94	900.00
Djibouti	0.30	176.26	220.00
Egypt	58.30	16,140.64	51.00
Iraq	89.86	11,735.67	216.00
Jordan	0.94	898.97	111.00
Kuwait	0.02	131.58	121.00
Lebanon	4.50	6,143.25	661.00
Libya	0.70	45.59	56.00
Mauritania	11.40	287.44	92.00
Morocco	29.00	953.85	346.00
Oman	1.40	950.57	125.00
Palestine	0.84	3,206.90	402.00
Qatar	0.06	882.80	74.00
Saudi Arabia	2.40	13.84	59.00
Somalia	14.70	333.11	282.00
Sudan	37.80	335.40	250.00
Syrian Arab Republic	16.80	1,206.81	252.00
Tunisia	4.62	457.88	207.00
United Arab Emirates	0.15	377.83	78.00
Yemen	2.10	89.21	167.00
Arab Group	288.87	553.52	4,842.00
Afghanistan	65.33	1,723.29	327.00
Albania	30.20	25,139.43	1,485.00
Azerbaijan	34.68	7,273.03	447.00
Bangladesh	1,227.00	134,465.75	2,666.00
Brunei Darussalam	8.50	634,328.36	2,722.00
Indonesia	2,019.00	35,734.51	2,702.00
Iran (Islamic Republic of)	137.00	2,788.46	228.00
Kazakhstan	108.40	521.22	250.00
Kyrgyzstan	23.62	2,230.13	533.00
Malaysia	580.00	74,843.54	2,875.00
Maldives	0.03	4,285.71	1,972.00
Pakistan	246.80	9,127.22	494.00
Tajikistan	21.91	4,494.36	691.00
Turkey	211.60	5,509.41	593.00
Turkmenistan	24.77	732.02	161.00
Uzbekistan	48.87	1,831.02	206.00
Guyana	271.00	161,501.79	2,387.00
Suriname	99.00	1,192,771.08	2,331.00
Asian Group	5,157.71	9,964.99	23,070.00
OIC Total	7,261.93	5,198.56	47,043.00
World	54,705.59	11,114.04	208,187.00

Source: FAOSTAT and AQUASTAT

Annex 33: Fertilizer Consumption, Kilograms per Hectare of Cropland

Country Name	2005	2010	2015	2018
Benin	0,42	7,37	0,1	30,17
Burkina Faso	15,03	9,3	16,02	17,29
Cameroon	6,62	7,44	10,91	10,36
Chad	..	..	..	..
Cote d'Ivoire	7,12	12,58	18,35	13,51
Gabon	5,48	2,07	20,08	29,56
Gambia	9,6	7,22	0,55	7,95
Guinea	0,74	0,75	0,73	2,57
Guinea-Bissau	..	..	..	..
Mali	14,54	18,07	26,87	24,18
Mozambique	1,36	7,78	3,97	6,38
Niger	0,38	0,5	0,4	0,38
Nigeria	6,11	10,15	7,09	16,57
Senegal	9,72	8,08	15,95	21,72
Sierra Leone	..	..	..	..
Togo	0,3	9,08	3,13	5,43
Uganda	0,71	1,29	1,22	2,49
African Group	4,595882353	5,981176471	7,374705882	11,09176471
Algeria	6,68	14,09	20,75	18,27
Bahrain	2906,666667	1721,249974	1318,74998	
Comoros	..	..	..	..
Djibouti	..	..	..	..
Egypt, Arab Rep.	436,56	370,47	428,59	431,88
Iraq	40,6	32,51	14,74	47,93
Jordan	248,54	114,67	128,29	81,93
Kuwait	34040	128.3959991	13604.64074	750.7237854
Lebanon	77,68	106,3	144,27	146,51
Libya	25,16	32,26	15,31	8,26
Mauritania	..	..	..	..
Morocco	57,64	49,17	63,9	61,79
Oman	257,51	256,21	249,46	223
Palestine	..	..	..	..
Qatar	70,42	278,79	179,77	200
Saudi Arabia	90,31	58,72	84,15	76,93
Somalia	..	..	..	..
Sudan	3,85	8,16	0,65	0,39
Syrian Arab Republic	71,4	27,16	0,61	1,9
Tunisia	25,34	25,82	25,3	23,05
United Arab Emirates	176,5	404,23	380,78	385,67
Yemen, Rep.	3,22	15,91	1,44	3,03
Arab Group	1751,730758	165,6416351	757,3363964	117,2030374
Afghanistan	3,76	1,75	3,94	7,45
Albania	91,75	76,47	95,29	58,49
Azerbaijan	11,93	8,89	45,41	54,1
Bangladesh	179,59	192,02	269,99	287,74
Brunei Darussalam	308,5	431,75	141,8	141,8
Guyana	20,71	36,86	51,23	55,5
Indonesia	80,89	96,04	117,56	121,22
Iran	94,51	81,4	42,32	42,37
Kazakhstan	1,42	2,03	4,27	8,22
Kyrgyz Republic	23,32	21,41	9,83	20,04
Malaysia	221,22	260,55	209,7	209,98
Maldives	11,13	53,34	36,23	64,99
Pakistan	120,31	134,41	133,94	152,04
Suriname	94,76	191,08	188,91	120,51
Tajikistan	14,28	8,14	21,11	14,49
Turkey	77,71	86,23	92,03	93,34
Turkmenistan	..	..	..	..
Uzbekistan	138,25	189,12	224,39	229,45
Asian Group	83,00222222	103,9716667	93,775	93,42944444
OIC Total	613,1096207	91,86482609	286,1620341	73,90808218
World Total	103,44	114,31	120,17	120,67

Source: World Development Indicator

Annex 34: Average Dietary Energy Supply Adequacy, Percentage

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

Source: FAOSTAT

Annex 35: Average Value of Food Production, Int. Dollars/Caput

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
Cote d'Ivoire	262	258	262	85
Gabon	172	157	148	43
Gambia, The	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	152,7058824	158,4705882	172,2352941	55
Algeria	132	176	228	72
Bahrain	33	23	24	9
Comoros	115	106	96	29
Djibouti	67	78	81	26
Egypt, Arab Rep.	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, Rep.	61	65	73	21
Arab Group	153,15	152,6	141,4761905	45,57142857
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 Rep.	276	339	310	104
Kazakhstan	341	403	414	150
Kyrgyz Republic	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
Turkey	410	428	470	159
Turkmenistan	274	342	334	105
Uzbekistan	211	251	297	105
Asian Group	220,9444444	245,8888889	268,7222222	93,5
OIC Total	175,6001089	185,653159	194,1445689	64,69047619
World Total	259	280	301	103

Source: FAOSTAT

Annex 36: Average Protein Supply, gr/caput/day

Country Name	2000-2002	2005-2007	2010-2012	2016-2018
Benin	55,7	58,4	62	64,3
Burkina Faso	68,7	74,7	79,7	78,7
Cameroon	55,7	62	67,7	71,6
Chad	63	61,3	62	61,7
Cote d'Ivoire	51	55	57,3	57,7
Gabon	75,6	80,3	82,4	80,3
Gambia, The	58,3	58	63,3	64,7
Guinea	51	51,7	54,7	57,3
Guinea-Bissau	44	43	43,7	43
Mali	68	74	81	81,7
Mozambique	36,4	42	45,7	43
Niger	68	75,4	80,3	82
Nigeria	58	63	62,7	58
Senegal	55,6	57,7	59,3	62
Sierra Leone	44,4	50,3	55,3	50,3
Togo	49,6	52	56,4	57,7
Uganda	49,7	51	54	47,6
African Group	56,04117647	59,4	62,79411765	62,44705882
Algeria	77	83,3	88,4	92,3
Bahrain	33	23	24	9
Comoros				
Djibouti	48,3	58,7	63,3	65,3
Egypt, Arab Rep.	94,3	97,7	102,7	97
Iraq	53,4	54,7	61	64
Jordan	76,1	80	81	70
Kuwait	102,3	114,6	104,5	100,7
Lebanon	91,3	83,3	79	69,3
Libya				
Mauritania				
Morocco	84	89,7	95,3	99,7
Oman	75,4	76,4	88	84,4
Palestine				
Qatar				
Saudi Arabia	82	83,7	89,7	88,3
Somalia				
Sudan			23,2	72,3
Syrian Arab Republic				
Tunisia	89,3	90,7	98	99,7
United Arab Emirates	108,8	103,6	99,7	111,7
Yemen, Rep.	57	55,7	58,3	52
Arab Group	76,58571429	78,22142857	77,07333333	78,38
Afghanistan	51,4	54	58	55,7
Albania	93	97,3	108,3	116,7
Azerbaijan	68,3	84,7	90	92
Bangladesh	49	52	54,3	59,7
Brunei Darussalam	87,4	85	87,4	
Guyana	76,7	73,7	75,7	84,7
Indonesia	52,3	54,3	60,3	66,7
Iran, Islamic Rep.	81,7	83,7	86	85,3
Kazakhstan	88	91,3	96	91
Kyrgyz Republic	83,7	82,3	85	83,3
Malaysia	75,3	78,7	79,3	77,3
Maldives	100,7	91,6	115,4	85,5
Pakistan	59,3	60,4	63,7	65,7
Suriname	56,3	58	62,3	60,7
Tajikistan	49	50,7	54,7	53,3
Turkey	103,7	102,7	104,7	109,3
Turkmenistan	81,4	90	90,7	89,3
Uzbekistan	66,3	73,7	80,3	93,3
Asian Group	73,52777778	75,78333333	80,67222222	80,55882353
OIC Total	68,71822284	71,13492063	73,5132244	73,79529412
World Total	72,6	74,5	77,8	80,1

Source: FAOSTAT

Annex 37 Number of People Undernourished, Million People

Country Name	1999-2001	2004-2006	2009-2011	2014-2016	2016-2018
Benin	1.6	1.2	1.1	1	1.1
Burkina Faso	2.9	3.3	3.3	3.6	3.8
Cameroon	4.7	3.5	2.3	1.8	2.4
Chad	3.3	3.9	4.8	5.1	5.6
Cote d'Ivoire	3.4	3.7	4.5	4.7	4.6
Gabon	0.1	0.2	0.2	0.2	0.2
Gambia, The	0.2	0.2	0.2	0.2	0.2
Guinea	2.3	2.1	1.9	1.8	2.1
Guinea-Bissau	0.3	0.3	0.3	0.5	0.5
Mali	1.6	1.4	1	1	1.2
Mozambique	7.4	7.8	6.9	7.6	8.3
Niger	2.5	2.1	1.8	2.3	3.6
Nigeria	11.4	9.1	9.9	17.4	25.6
Senegal	2.8	2.4	1.7	1.9	1.8
Sierra Leone	1.8	2.1	1.7	1.7	1.9
Togo	1.5	1.5	1.4	1.3	1.3
Uganda	6.7	6.9	10.5	15.1	17.6
African Group	3.205882	3.041176	3.147059	3.952941	4.811765
Algeria	3.3	2.9	2.3	1.6	1.6
Bahrain	0	0	0	0	0
Comoros	0	0	0	0	0
Djibouti	0.3	0.3	0.2	0.2	0.2
Egypt, Arab Rep.	3.7	4.2	3.8	4.1	4.4
Iraq	6.7	7.6	8.4	10.2	11.1
Jordan	0.6	0.4	0.6	1.1	1.2
Kuwait					0.1
Lebanon		0.1	0.2	0.6	0.7
Libya	0	0	0	0	0
Mauritania	0.3	0.4	0.3	0.4	0.5
Morocco	2	1.7	1.7	1.2	1.2
Oman	0.3	0.3	0.2	0.2	0.3
Palestine	0	0	0	0	0
Qatar	0	0	0	0	0
Saudi Arabia	1.3	1.9	1.9	1.8	2.3
Somalia	0	0	0	0	0
Sudan	0	0	0	7.8	8.2
Syrian Arab Republic	..	..	..	..	..
Tunisia	0.5	0.6	0.5	0.5	0.5
United Arab Emirates		0.2	0.5	0.3	0.2
Yemen, Rep.	5.3	6.2	6.1	9.3	11
Arab Group	1.35	1.34	1.335	1.965	2.071429
Afghanistan	9.3	8.3	6.4	9.6	10.6
Albania	0.2	0.3	0.2	0.2	0.2
Azerbaijan	1.9	0.5			
Bangladesh	27.3	23.8	25.7	25.3	24.2
Brunei Darussalam	0	0	0	0	0
Guyana	0	0	0	0	0
Indonesia	39.2	44.1	32.3	22.5	22
Iran, Islamic Rep.	3.3	4.3	4.4	4.1	4
Kazakhstan	0.9	0.9	0.5		
Kyrgyz Republic	0.8	0.5	0.4	0.4	0.4
Malaysia	0.7	1	1.1	0.9	0.8
Maldives	0	0	0	0	0
Pakistan	32.5	35.9	35.9	39.3	40
Suriname	0	0	0	0	0
Tajikistan	..	..	..	..	..
Turkey	..	..	..	..	..
Turkmenistan	0.4	0.2	0.2	0.3	0.3
Uzbekistan	4	3.9	2.6	2	2
Asian Group	7.53125	7.73125	7.313333	7.471429	7.464286
OIC Total	199.3	202.2	189.9	211.1	229.8
World Total	916.3	940.5	826.1	790.2	809.9

Source: FAOSTAT

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

Country Name	2000	2005	2010	2015	2020	Country Name
Benin	2478	2582	2705	2946	3323	Benin
Burkina Faso	1297	1527	1716	1925	2161	Burkina Faso
Cameroon	2751	2982	3086	3459	3576	Cameroon
Chad	897	1618	1733	1857	1520	Chad
Cote d'Ivoire	4094	3670	3661	4417	5174	Cote d'Ivoire
Gabon	16567	15761	14415	15510	14400	Gabon
Gambia, The	2271	2216	2347	2059	2159	Gambia, The
Guinea	1705	1794	1871	2088	2671	Guinea
Guinea-Bissau	1723	1678	1747	1800	1848	Guinea-Bissau
Mali	1628	1959	2083	2140	2216	Mali
Mozambique	631	821	1027	1262	1229	Mozambique
Niger	933	962	1037	1132	1197	Niger
Nigeria	2977	3997	4932	5515	4917	Nigeria
Senegal	2595	2758	2797	2967	3300	Senegal
Sierra Leone	1063	1245	1414	1552	1648	Sierra Leone
Togo	1700	1574	1626	1921	2108	Togo
Uganda	1253	1480	1861	2054	2178	Uganda
African Group	2739	2860	2945	3212	3272	African Group
Algeria	8711	10505	10971	11697	10682	Algeria
Bahrain	49406	47493	44600	48111	40933	Bahrain
Comoros	2834	2816	2878	2960	3141	Comoros
Djibouti				4489	5481	Djibouti
Egypt, Arab Rep.	7745	8397	10340	10570	11951	Egypt, Arab Rep.
Iraq	9365	7542	8749	10122	9255	Iraq
Jordan	8741	10577	11316	10146	9817	Jordan
Kuwait	54985	68234	58810	54834		Kuwait
Lebanon	14362	14264	19499	16299	11649	Lebanon
Libya	16746	19884	22540	11022	10282	Libya
Mauritania						Mauritania
Morocco	4371	5228	6282	7127	6916	Morocco
Oman	33840	31910	33865	30147		Oman
Palestine	4503	4866	5411	6049	5394	Palestine
Qatar	86566	87722	95908	95965	85266	Qatar
Saudi Arabia	41955	44310	44037	48921	44328	Saudi Arabia
Somalia				879	830	Somalia
Sudan	2110	2502	3089	4188	4023	Sudan
Syrian Arab Republic						Syrian Arab Republic
Tunisia	7329	8523	10113	10510	9728	Tunisia
United Arab Emirates	102495	90895	54922	65219		United Arab Emirates
Yemen, Rep.						Yemen, Rep.
Arab Group	26827	27392	26078	23645	16855	Arab Group
Afghanistan		1287	1957	2068	1979	Afghanistan
Albania	5893	8041	10750	11879	13295	Albania
Azerbaijan	4064	7222	14313	14854	13700	Azerbaijan
Bangladesh	1938	2280	2884	3700	4818	Bangladesh
Brunei Darussalam	69023	69788	67753	63148	62244	Brunei Darussalam
Guyana	7776	7965	9789	11262	18680	Guyana
Indonesia	5689	6699	8287	10150	11445	Indonesia
Iran, Islamic Rep.	10067	11998	13806	12698	12433	Iran, Islamic Rep.
Kazakhstan	10276	16536	20751	24290	25337	Kazakhstan
Kyrgyz Republic	3079	3558	4141	4805	4706	Kyrgyz Republic
Malaysia	15917	18114	20536	24787	26435	Malaysia
Maldives	13359	12608	16306	17285	13049	Maldives
Pakistan	3245	3707	3907	4278	4623	Pakistan
Suriname	13068	15908	18840	19317	16130	Suriname
Tajikistan	1325	1924	2390	2985	3658	Tajikistan
Turkey	15434	18252	20028	25959	28385	Turkey
Turkmenistan	4622	5629	8617	12994		Turkmenistan
Uzbekistan	2786	3405	4652	6087	6994	Uzbekistan
Asian Group	11033	11940	13873	15141	15759	Asian Group
OIC Total	13533	14064	14298	13999	11962	OIC Total
World Total	11080	12461	13891	15510	16194	World Total

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
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
Cameroon	53.4	58.6	63.8	69.0	74.1	75.6
Chad	40.8	43.3	45.7	48.2	50.7	50.8
Cote 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
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
Mali	31.0	40.6	50.6	60.8	70.9	77.0
Mozambique	35.6	38.9	42.6	46.3	50.1	51.1
Niger	35.7	40.7	45.7	50.8	56.2	58.2
Nigeria	42.4	48.3	54.2	60.1	65.5	68.5
Senegal	61.4	65.2	68.9	72.6	76.3	78.5
Sierra Leone	38.8	44.0	49.2	54.3	59.5	62.6
Togo	48.7	51.7	54.8	57.9	61.1	63.1
Uganda	43.6	51.6	59.6	67.7	75.8	79.0
African Group	46,06	55,68	60,87	66,05	71,18	73,29
Algeria	91.7	90.5	88.8	87.0	84.9	83.6
Bahrain	94.9	97.1	100	100	100	100
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
Libya	71.2	71.2	71.2			
Mauritania	31.8	38.2	44.6	50.7	56.7	57.9
Morocco	74.0	76.9	79.3	81.9	84.6	85.4
Oman	79.3	81.8	85.5	89.4	93.3	93.4
Palestine	95.8	96.0	86.7	76.0	65.1	58.4
Qatar	98.7	98.8	99.4	99.9	100	100
Saudi Arabia	92.3	94.0	95.7	97.0	97.0	97.0
Somalia		21.1	25.3	30.7	31.7	
Sudan					55.5	55.5
Syrian Arab Republic	85.8	86.7	88.0	89.1	90.1	90.1
Tunisia	84.2	87.9	91.1	94.1	96.9	97.7
United Arab Er.	99.7	99.7	99.7	99.6	99.6	99.6
Yemen, Rep.	65.1	61.9	58.5	55.0	54.9	
Arab Group	72,74	78,41	79,51	77,22	80,46	76,35
Afghanistan	21.3	25.0	33.8	42.6	51.6	55.3
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
Brunei Darussalam						
Indonesia	71.2	75.4	79.3	82.6	85.7	87.4
Iran	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
Kyrgyz Rep.	74.5	76.3	80.0	83.8	87.6	90.0
Malaysia	91.1	93.0	94.8	96.4	97.9	98.2
Maldives	93.2	94.2	95.9	97.5	98.6	98.6
Pakistan	86.7	87.8	88.9	89.9	90.9	91.4
Tajikistan		57.2	61.5	66.6	71.7	73.8
Turkey	87.1	90.6	93.8	96.9	99.5	100.0
Turkmenistan		59.3	59.9	60.4		
Uzbekistan	89.9	89.2	88.4	87.5	87.3	
Guyana	80.0	83.9	87.8	91.8	95.9	98.3
Suriname		88.4	90.3	92.6	94.8	94.8
Asian Group	56,67222222	74,93333333	77,33333333	79,71111111	78,62777778	74,77222222
OIC	58,49065161	69,6744801	72,57100416	74,32696574	76,75444643	74,80393147
World	67,659	77,26	79,767	82,0255	83,788	82,6795

Source: FAOSTAT

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

Country Name	2000	2005	2010	2015	2019
Benin	46	51	39	11	12
Burkina Faso	53	56	36	14	41
Cameroon	17	14	12	23	25
Chad	78	26	40	49	36
Cote d'Ivoire	37	20	65	49	22
Gabon	46	38	49	65	52
Gambia, The	56	69	73	42	49
Guinea	68	28	40	54	25
Guinea-Bissau	77	22	19	92	70
Mali	15	26	31	54	30
Mozambique	30	26	32	50	52
Niger	32	32	21	44	41
Nigeria	17	19	14	29	6
Senegal	31	28	57	45	42
Sierra Leone	60	19	19	69	58
Togo	33	24	8	18	39
Uganda	59	53	46	32	43
African Group	44,41	32,41	35,35	43,53	37,82
Algeria					
Bahrain					
Comoros		41	39	27	29
Djibouti	26	39	21	10	27
Egypt, Arab Rep.	22	58	37	41	47
Iraq	35	59	34	38	85
Jordan	52	101	55	82	36
Kuwait	94	34	111	71	100
Lebanon	51	28	62	169	97
Libya					
Mauritania					
Morocco	63	43	22	37	33
Oman	70	30	32	60	39
Palestine					
Qatar					
Saudi Arabia	26	22	74	65	23
Somalia		9	38	146	90
Sudan		24	16	60	31
Syrian Arab Republic				36	20
Tunisia	75	29	29	25	24
United Arab Emirates	73	92	55	70	93
Yemen, Rep.	11	24	15	56	67
Arab Group	49,83	42,20	42,67	62,06	52,56
Afghanistan	52	52	21	93	43
Albania	73	62	60	105	36
Azerbaijan	87	29	81	21	76
Bangladesh	70	21	21	7	52
Brunei Darussalam	51	65	42	26	11
Guyana	44	45	39	57	50
Indonesia	42	9	22	27	34
Iran, Islamic Rep.	27	24	33	69	53
Kazakhstan	68	32	33	25	40
Kyrgyz Republic	92	101	55	26	34
Malaysia	23	29	25	42	19
Maldives	34	60	59	65	74
Pakistan	19	54	21	12	29
Suriname	43	21	26	44	24
Tajikistan	15	12	9	24	16
Turkey	39	20	19	12	32
Turkmenistan	18	48	29	53	12
Uzbekistan	21	50	71	35	79
Asian Group	45,44	40,78	37,00	41,28	39,67
OIC Total	46,6	38,5	38,3	49,0	43,4
World Total	5	13	9	6	9

Source: FAOSTAT



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