



Making Cooperation Work

COMCEC STRATEGY

For Building an Interdependent Islamic World

COMCEC AGRICULTURE OUTLOOK

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14th Meeting of COMCEC Agriculture Working Group
October 9th, 2019

Outline

1. Macro Agricultural Indicators

- Agricultural Value Added
- Agricultural Growth Rates
- Population and Employment
- International Trade

2. Sectorial Indicators

- Crop, Livestock and Fish Production
- Resource Use
- Productivity

3. State of Food Insecurity

- Undernourishment

4. Climate Change as the Main Driver of Food Insecurity in OIC

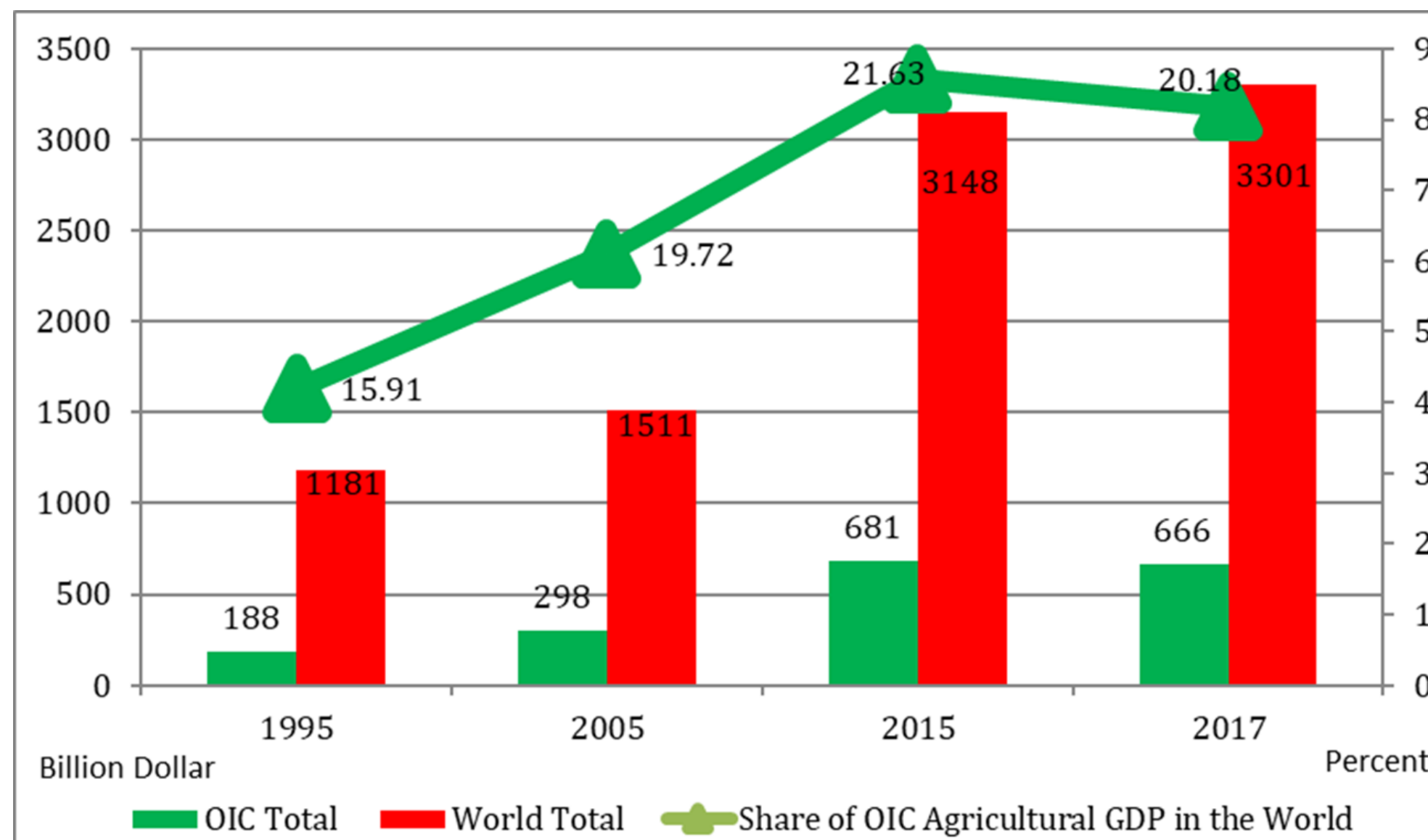
- Exposure Index
- Sensitivity Index
- Adaptive Capacity Index
- Vulnerability Index



1. Macro Agricultural Indicators

➤ Agricultural Value Added

OIC Agricultural GDP and its Share in the World

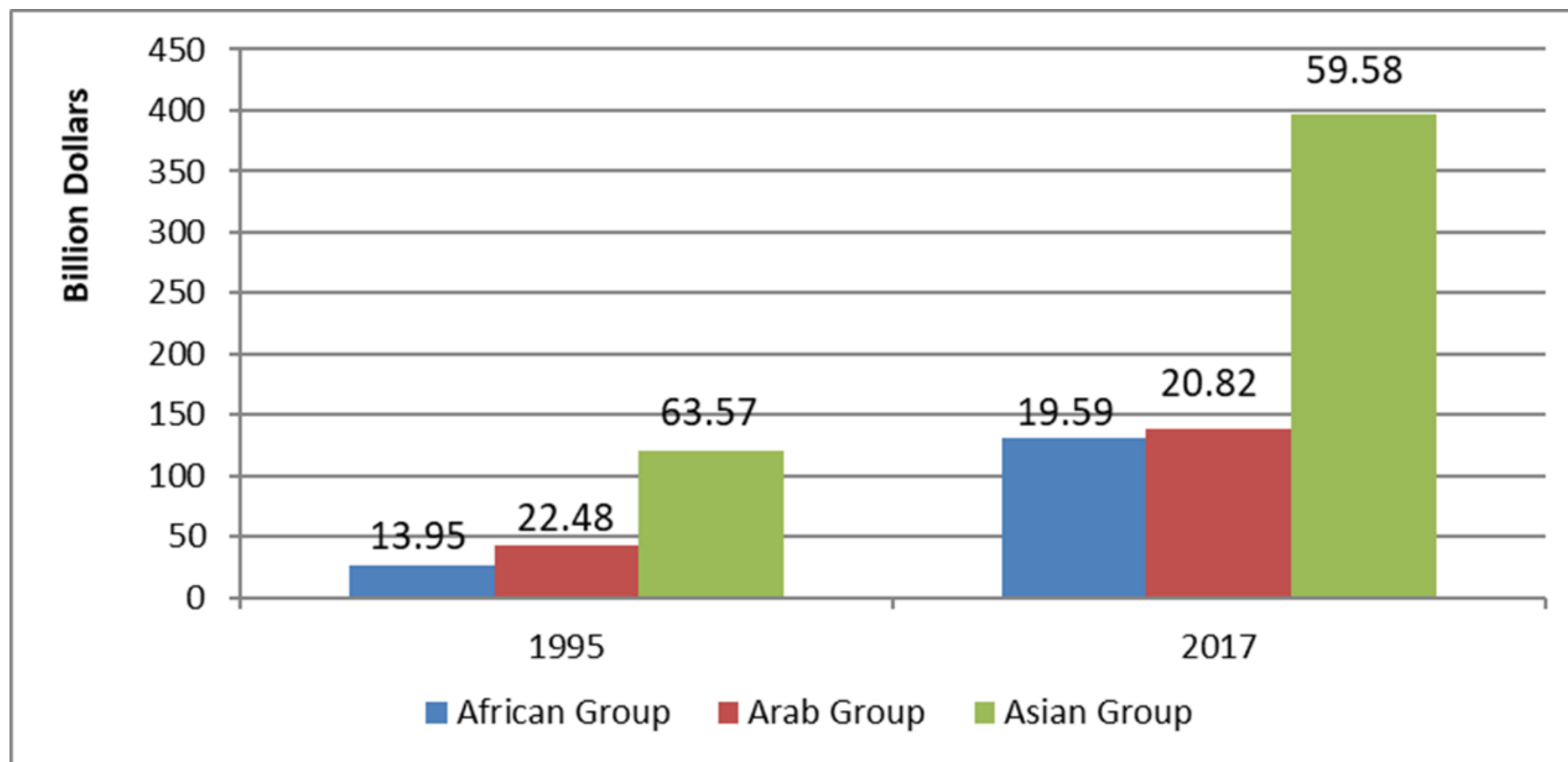


Source: Annexes 2-6

1. Macro Agricultural Indicators

➤ Agricultural Value Added

Agricultural GDP by Sub-Regions and their Shares

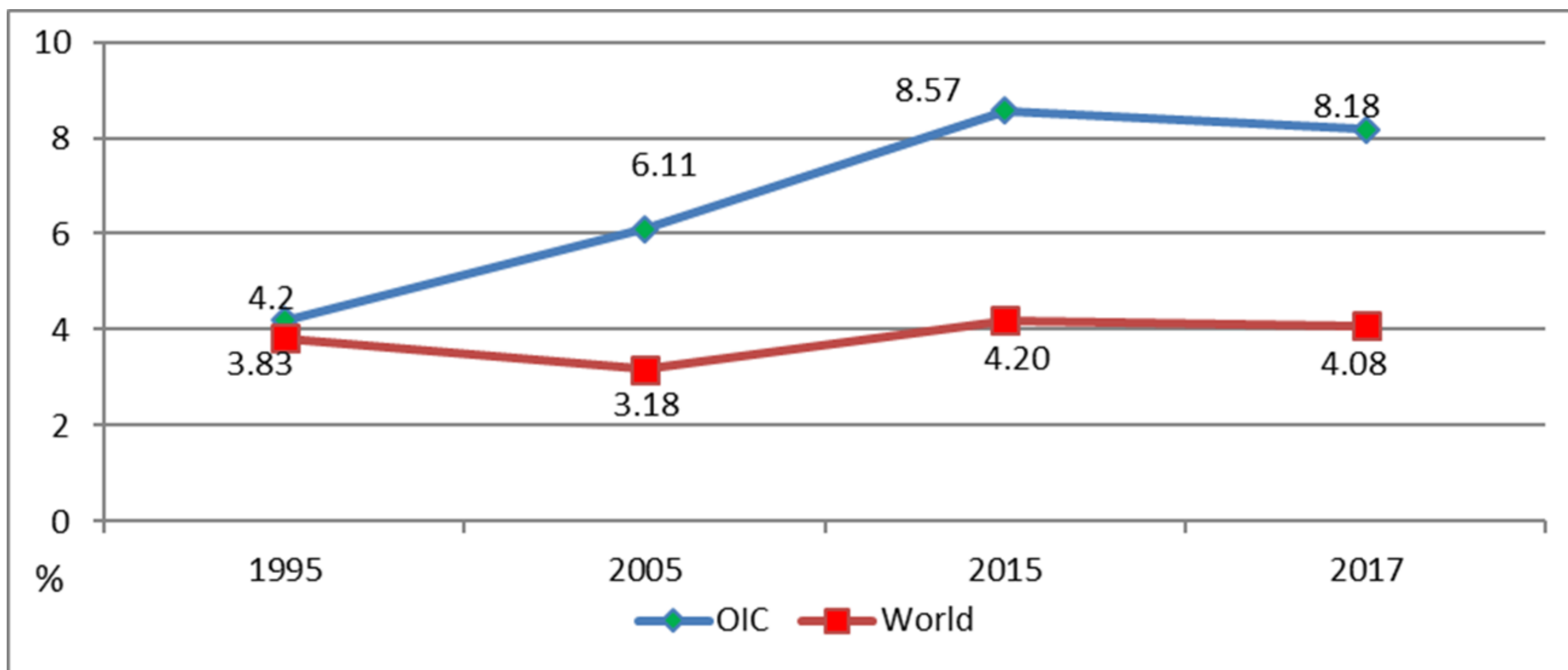


Source: Annexes 2-6

1. Macro Agricultural Indicators

➤ Agricultural Value Added

Shares of Agricultural GDP in the OIC and World



Source: Annexes 2-6



1. Macro Agricultural Indicators

➤ Agricultural Value Added

Agricultural GDP Rankings in the OIC

	2016			2017		
		Agricultural GDP (Billion Dollar)	Share of Agri. in GDP,%		Agricultural GDP (Billion Dollar)	Share of Agri. in GDP in OIC,%
1	Indonesia	125.6	19.06	Indonesia	133.6	20.04
2	Nigeria	84.9	12.88	Nigeria	78.3	11.75
3	Pakistan	64.7	9.81	Pakistan	69.8	10.47
4	Turkey	59.4	8.10	Turkey	51.8	7.77
5	Iran	40.5	6.12	Iran	43.1	6.47
6	Egypt	37.9	5.94	Sudan	37.5	5.62
7	Bangladesh	28.8	4.72	Bangladesh	33.5	5.03
8	Sudan	26.3	4.52	Malaysia	27.6	4.15
9	Malaysia	25.1	3.90	Egypt	27.0	4.06
10	Algeria	19.2	2.97	Algeria	20.6	3.09
Top Ten Total		517.0	78.45	Top Ten Total	511.0	76.7
OIC Total		659	20.9	OIC Total	666	20.2
World		3153		World	3301	

Source: Annexes 2-6



1. Macro Agricultural Indicators

➤ Growth Rates

Average Annual Agricultural Growth and Economic Growth (%)

Period	OIC		World	
	Agr. Growth	Economic Growth	Agr. Growth	Economic Growth
(1994-2004)	3.32	4.13	2.65	3.06
(2004-2016)	3.53	4.54	2.81	2.24
(1994-2016)	3.38	4.35	2.74	2.61

Average Annual Agricultural Growth by OIC Sub-Regions (%)

Source: Annexes 2-6

Period	African Group		Arab Group		Asian Group	
	Agr. Growth	Econ. Growth	Agr. Growth	Econ. Growth	Agr. Growth	Econ. Growth
(1994-2004)	6.54	5.41	4.06	4.09	2.17	3.94
(2004-2016)	4.89	4.97	2.32	3.94	3.33	4.89
(1994-2016)	5.64	5.17	3.12	4.01	2.81	4.46



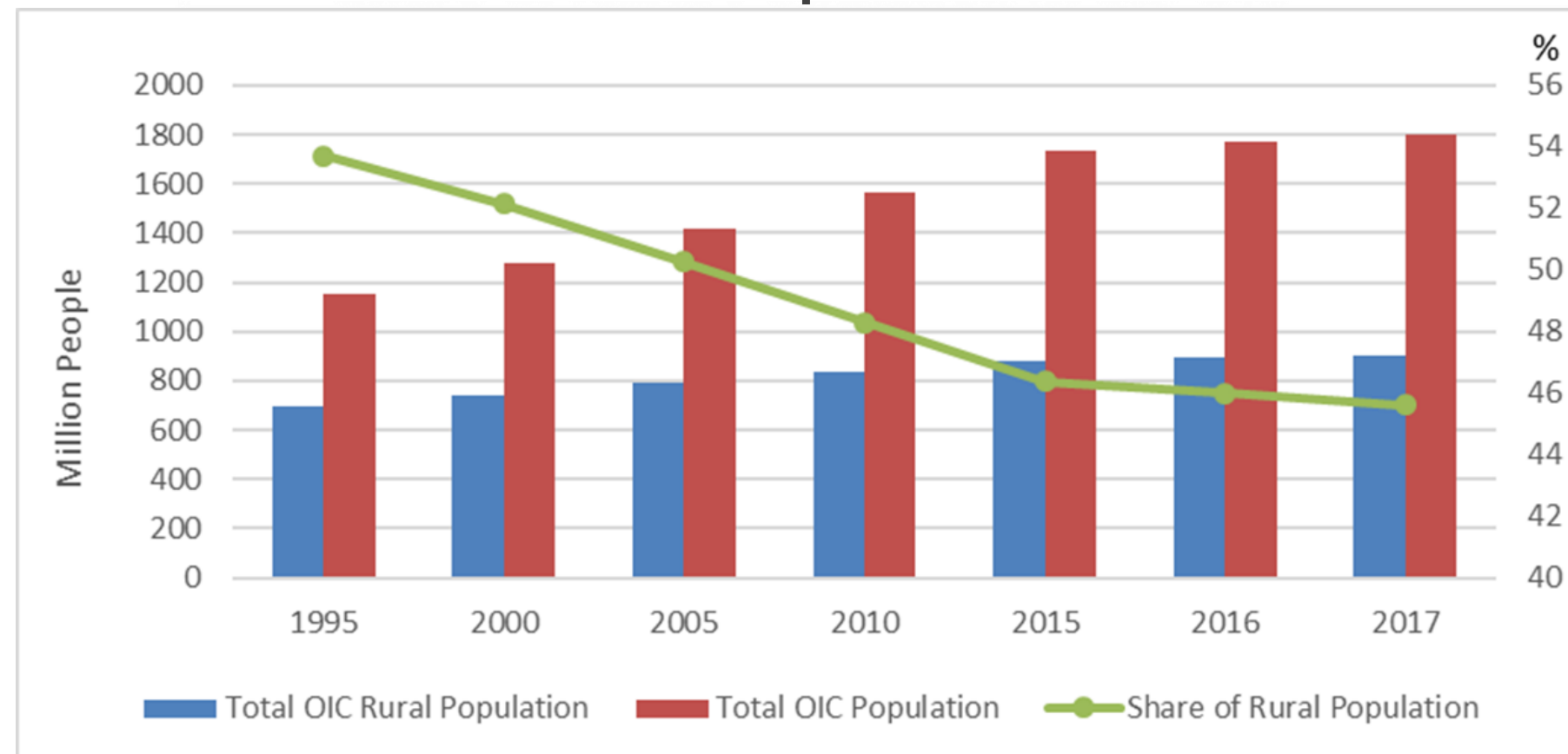
1. Macro Agricultural Indicators

➤ Total and Rural Population

Population Growth Rate in the OIC and 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

Share of Rural Population in the OIC

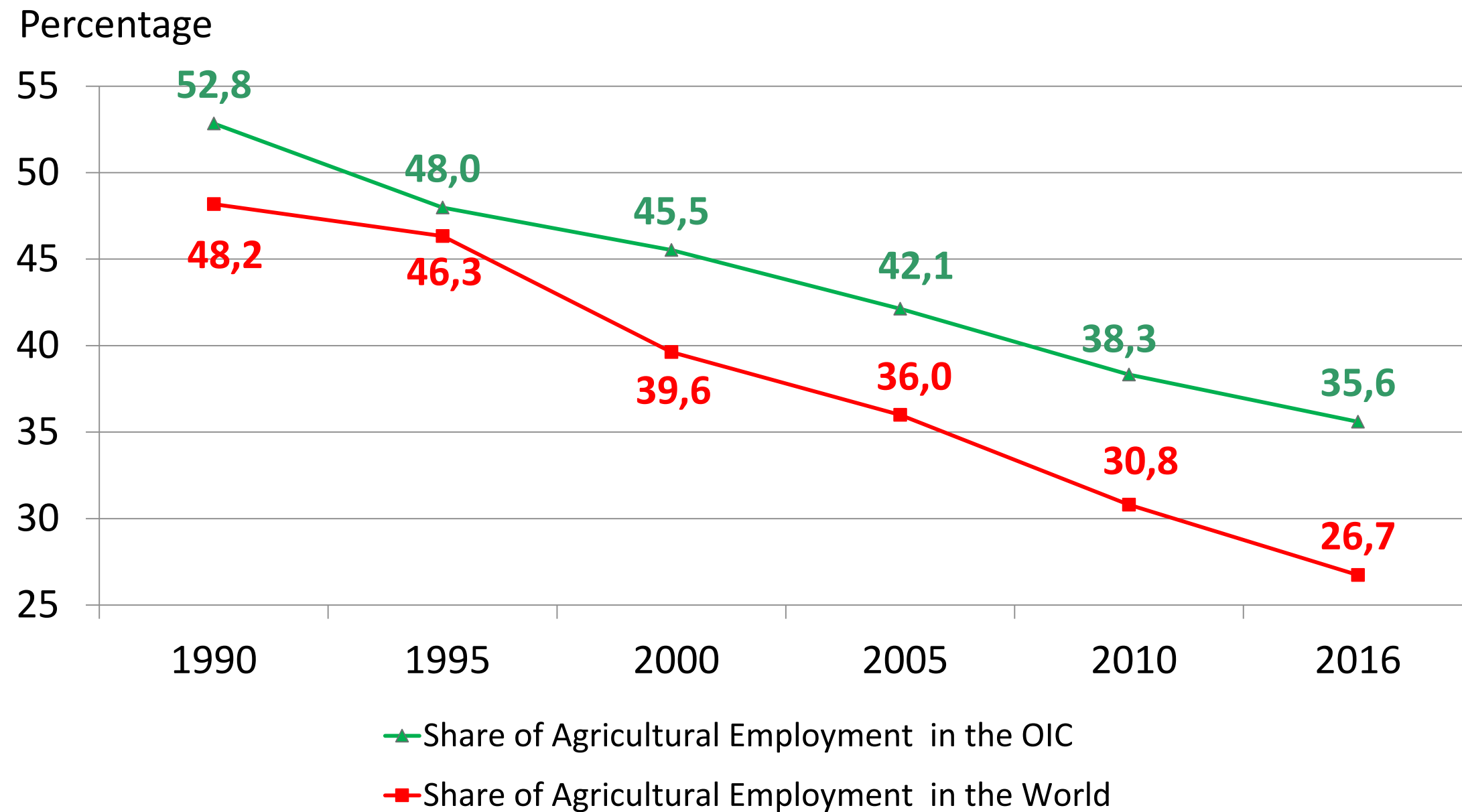


Source: Annexes 7-8

1. Macro Agricultural Indicators

➤ Agricultural Employment

Share of Agricultural Employment in the OIC and World



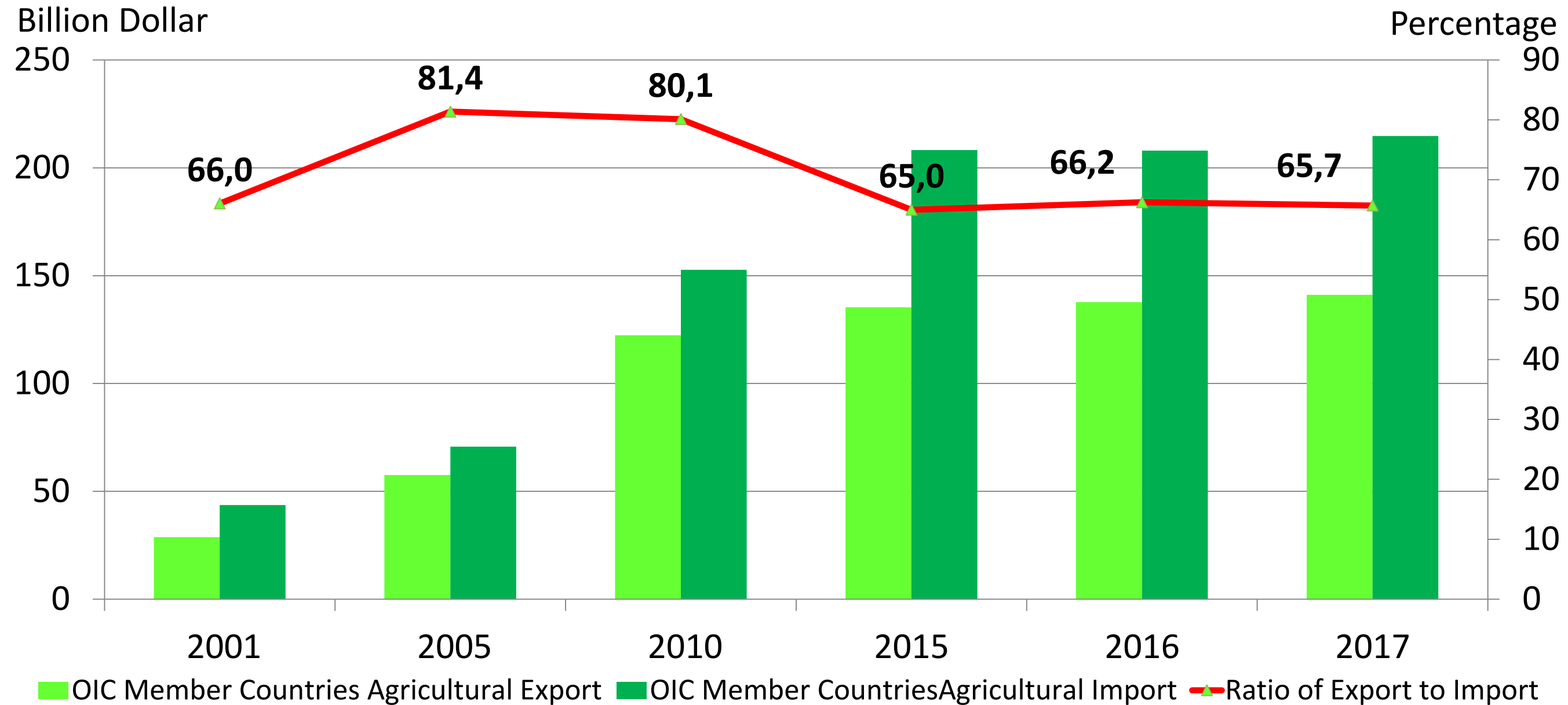
Source: Annexes 10-11



1. Macro Agricultural Indicators

➤ International Trade

OIC Agricultural Exports and Imports



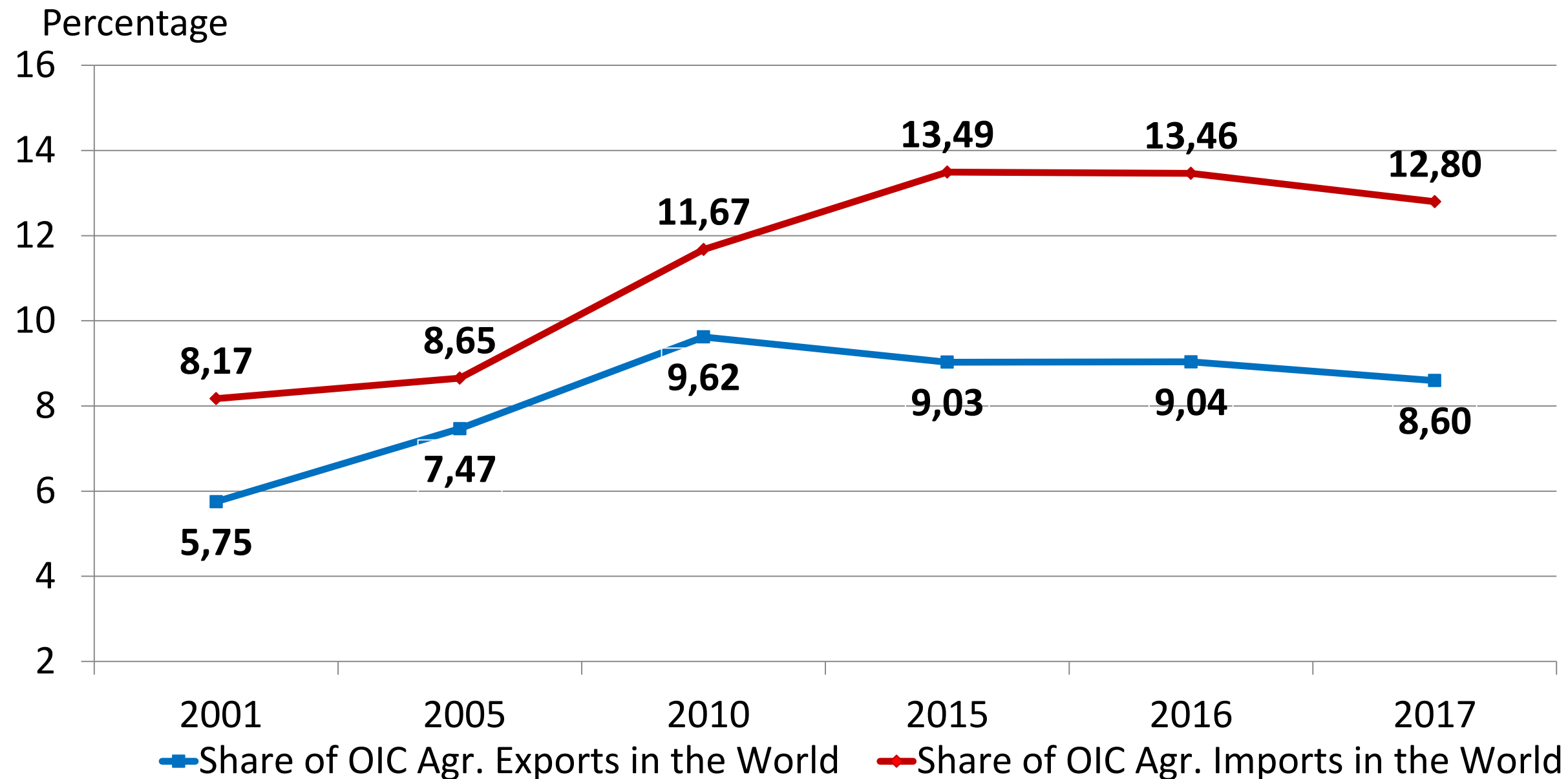
Source: Annexes 12-13



1. Macro Agricultural Indicators

➤ International Trade

Share of OIC Agricultural Trade in the World



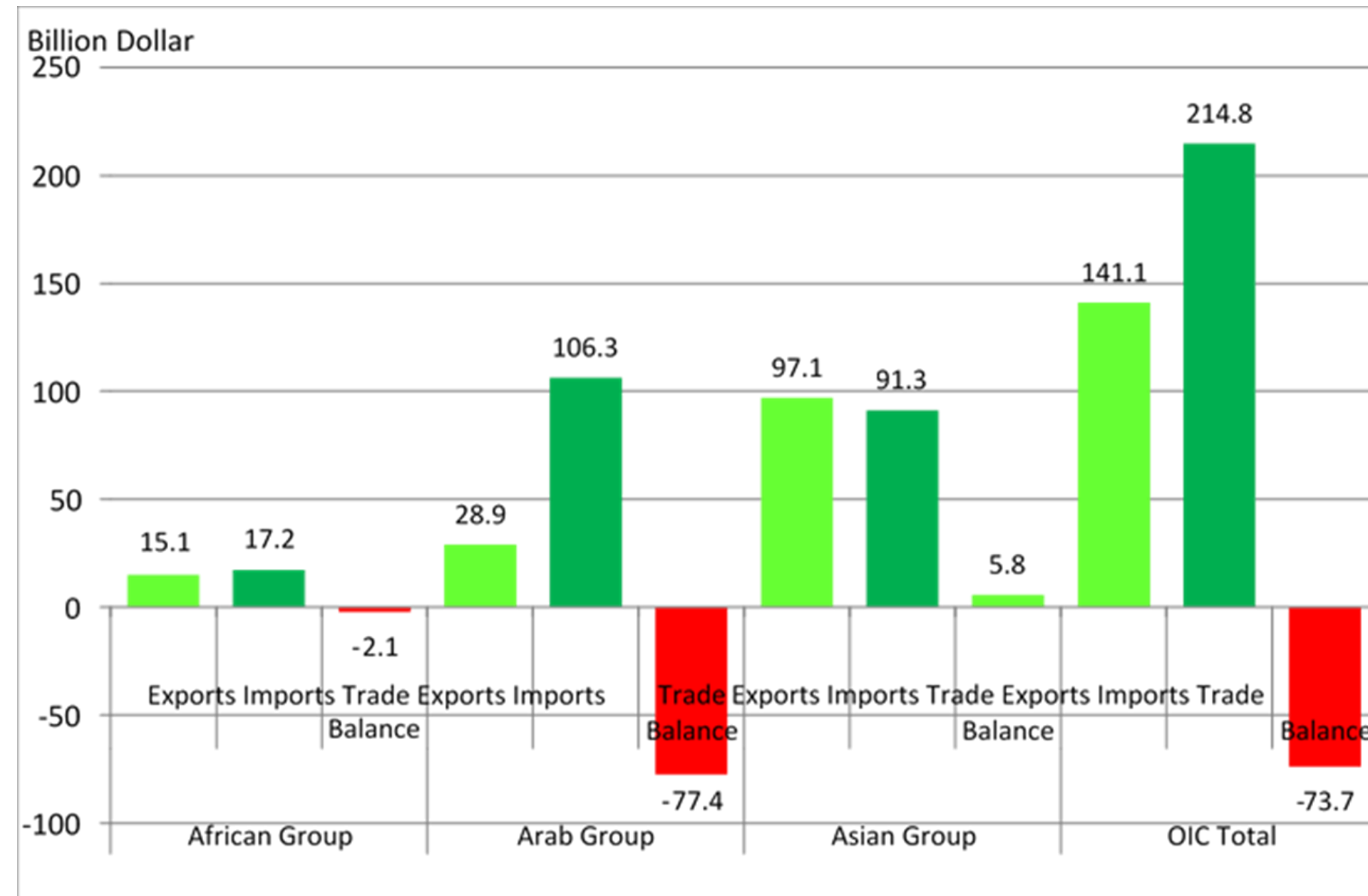
Source: Annexes 12-13



1. Macro Agricultural Indicators

➤ International Trade

Agricultural Trade Balance in the OIC by Sub-Regions



Source: Annexes 12-13

1. Macro Agricultural Indicators

➤ International Trade

Agricultural Exports and Imports in the OIC

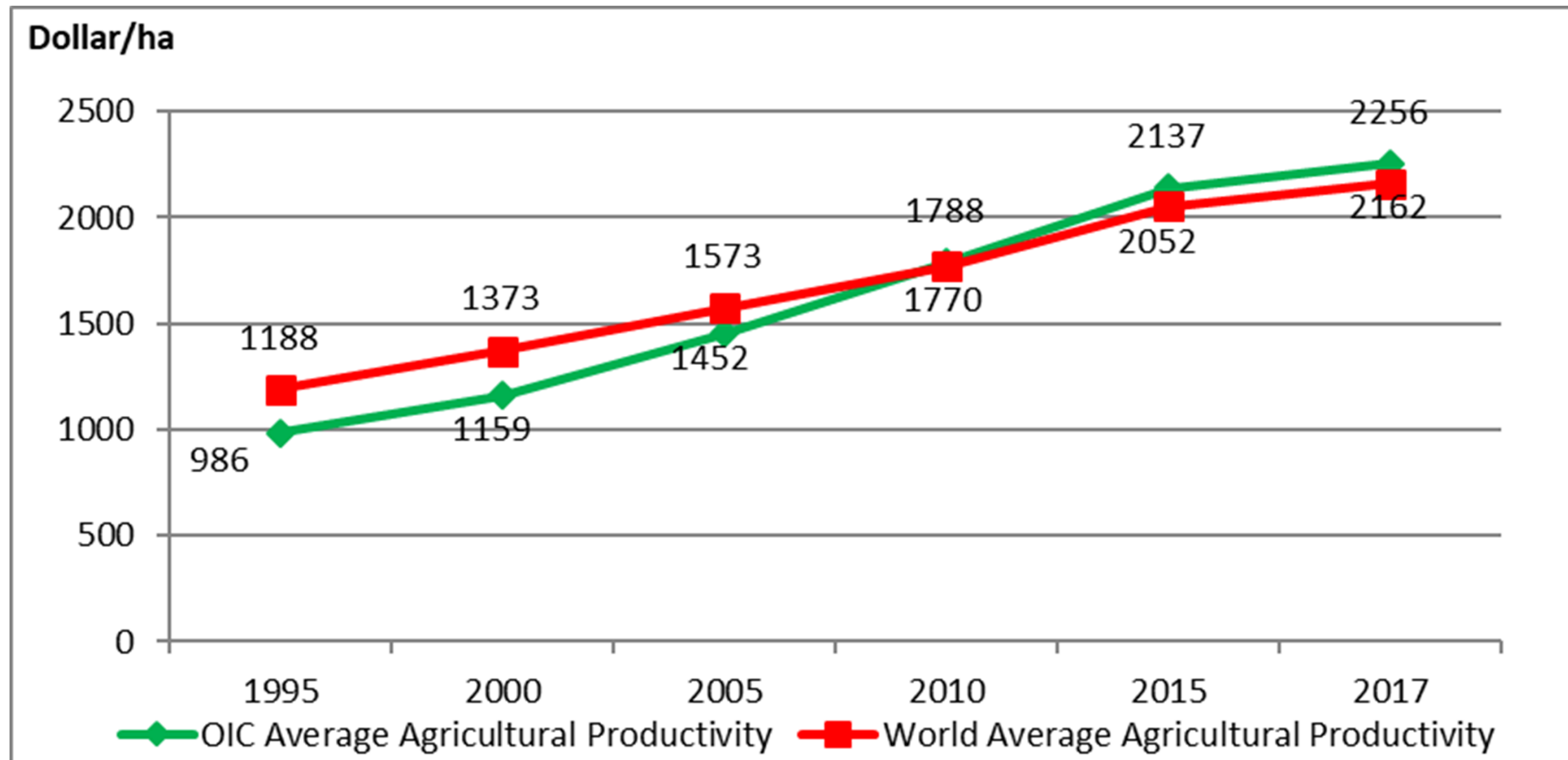
	EXPORTS (2017)	IMPORTS (2017)
Africa Group		
Share of Top 5	46.1	36.3
Top 5 Countries	Netherlands, France, USA, Belgium, India	India, France, Thailand, Brazil, USA
Share of Top 15	75.5	68.4
Africa Share in Top15	3.2	4.9
OIC Share in Top 15	8.8	8.5
Arab Group		
Share of Top 5	39.4	35.3
Top 5 Countries	Saudi Arabia, Oman, Spain, UAE, Kuwait	Brazil, India, Turkey, USA, Argentina
Share of Top 15	66.3	64.1
Arab Share in Top15	40.4	8.8
OIC Share in Top 15	40.4	14.9
Asia Group		
Share of Top 5	30.9	29.7
Top 5 Countries	India, China, USA, Netherlands, Singapore	Brazil, USA, Russian F. China, Indonesia
Share of Top 15	57.4	73.3
Asia Share in Top15	36.2	43.6
OIC Share in Top 15	8.7	11.8

Source: Annexes 12-13

2. Sectorial Indicators

➤ Agricultural Productivity

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

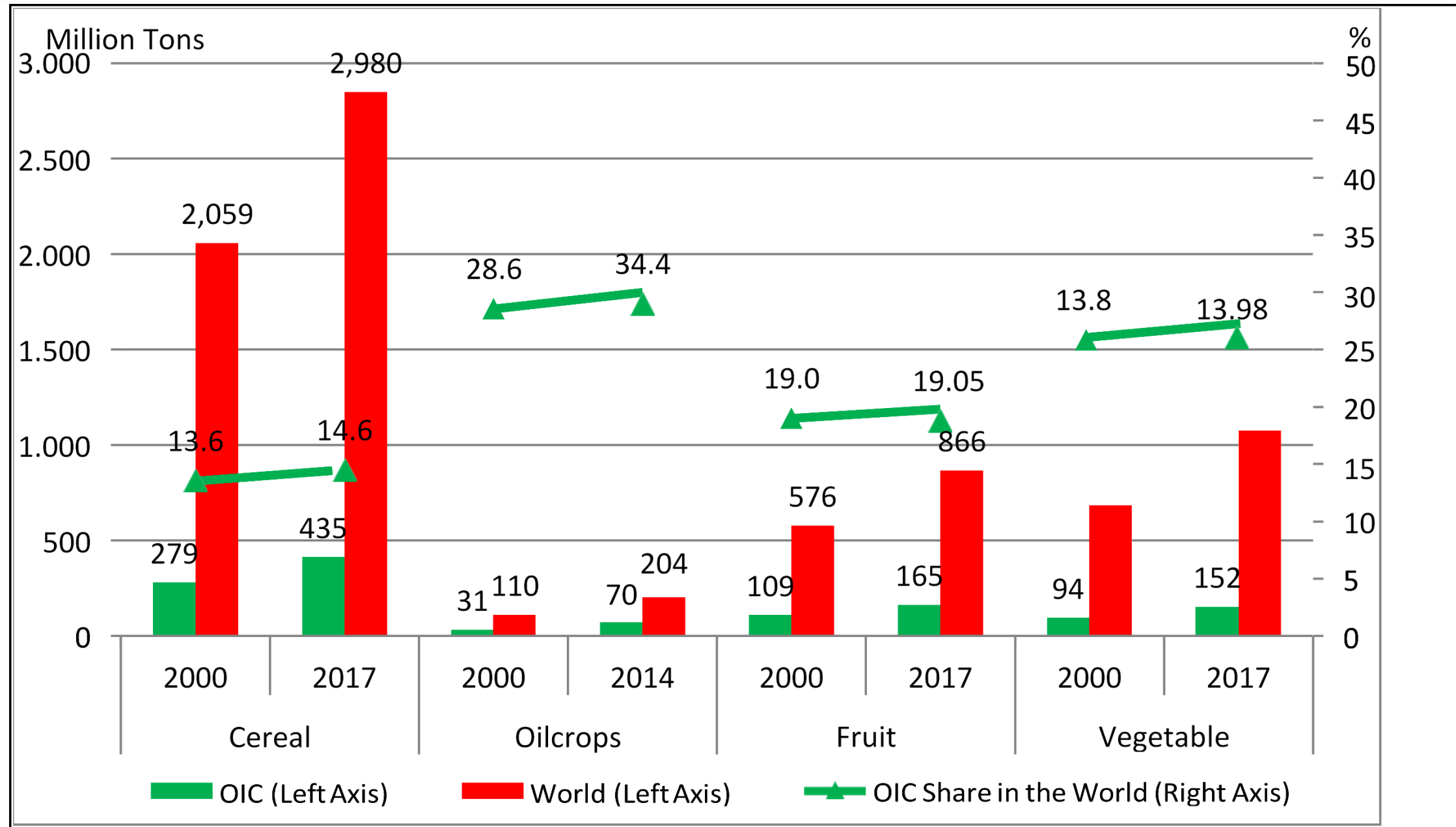


Source: Annex 28

2. Sectorial Indicators

➤ Crop, Livestock and Fish Production

Crop Productions in the OIC and Shares in the World

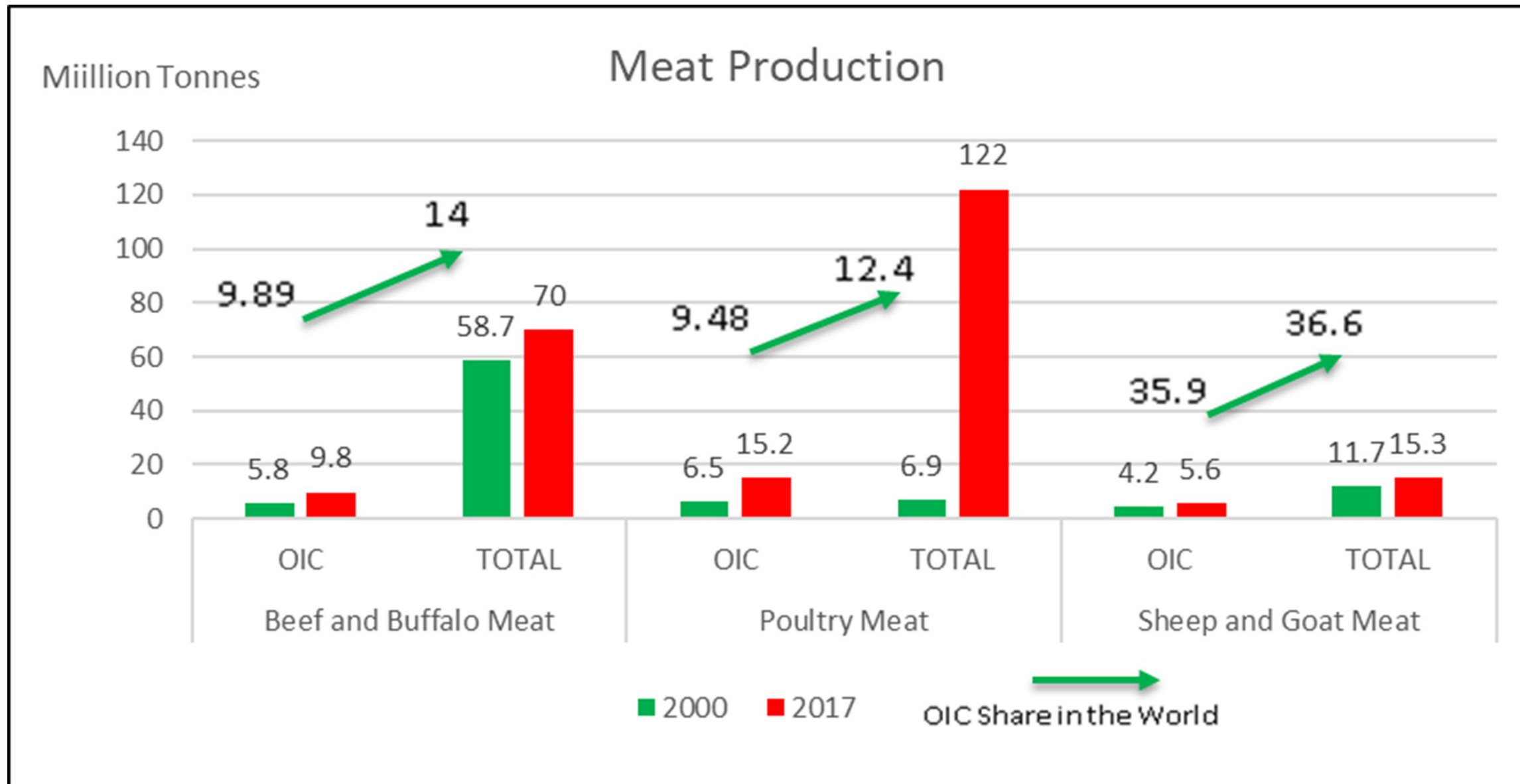


Source: FAOSTAT

2. Sectorial Indicators

➤ Crop, Livestock and Fish Production

Meat Production in the OIC and the World



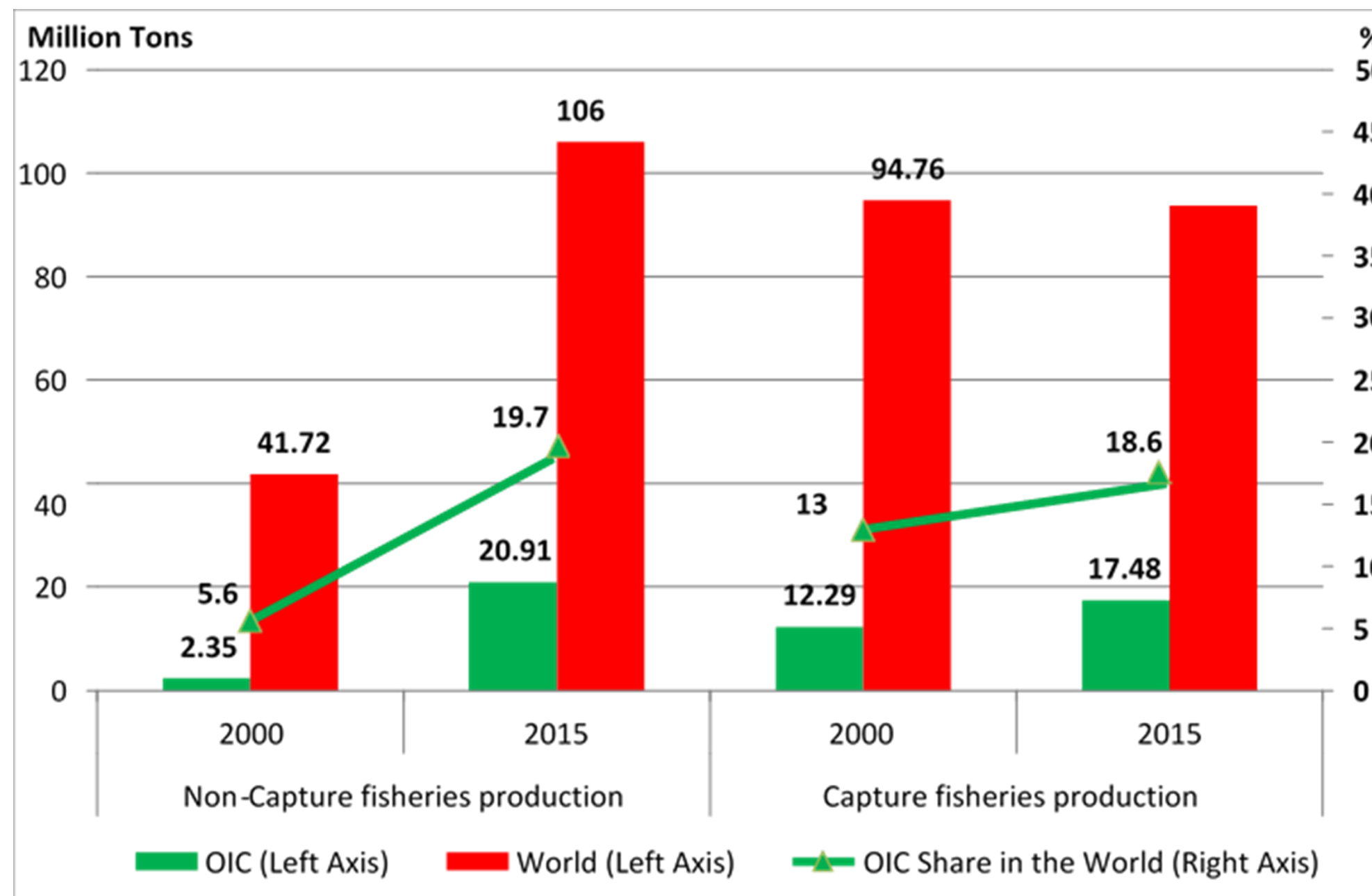
Source: FAOSTAT

2. Sectorial Indicators

17/25

➤ Crop, Livestock and Fish Production

Fish Production in the OIC and the World



Source: FAOSTAT



2. Sectorial Indicators

➤ Resource Use

Land Use in the OIC and the World, 2016

	Total Land Area	Agricultural Area	Arable land	Permanent Crops	Permanent Meadows and Pastures
OIC (million ha)	2,940	1,370	310	64	996
Share in Total Agr. Area (%)		100	22.6	4.7	72.7
World (million ha)	13,009	4,870	1,424	166	3,277
Share of OIC in the World (%)	22.60	28.1	21.8	38.6	30.4

Shares of Land Use in OIC Sub-Regions , 2016

OIC Sub-region	Land area	Agricultural Area	Arable land	Permanent Crops	Permanent Meadows and Pastures
African Group (%)	38.2	34.98	19.12	13.13	41.31
Arab Group (%)	26.13	26.02	33.54	27.26	23.61
Asian Group (%)	35.67	39.0	47.34	59.41	35.09
OIC Total (%)	100	100	100	100	100

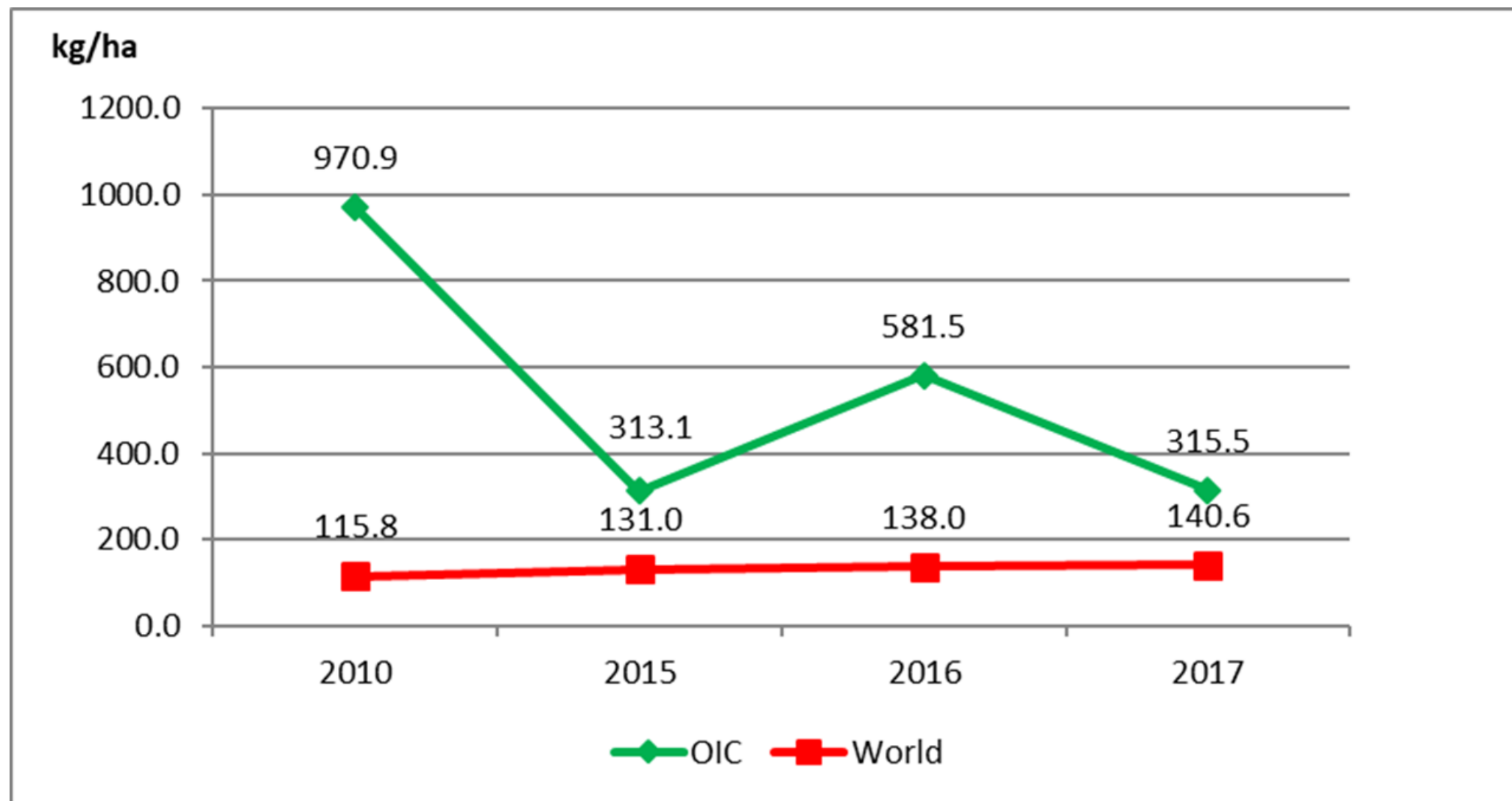
Source: FAOSTAT



2. Sectorial Indicators

➤ Resource Use

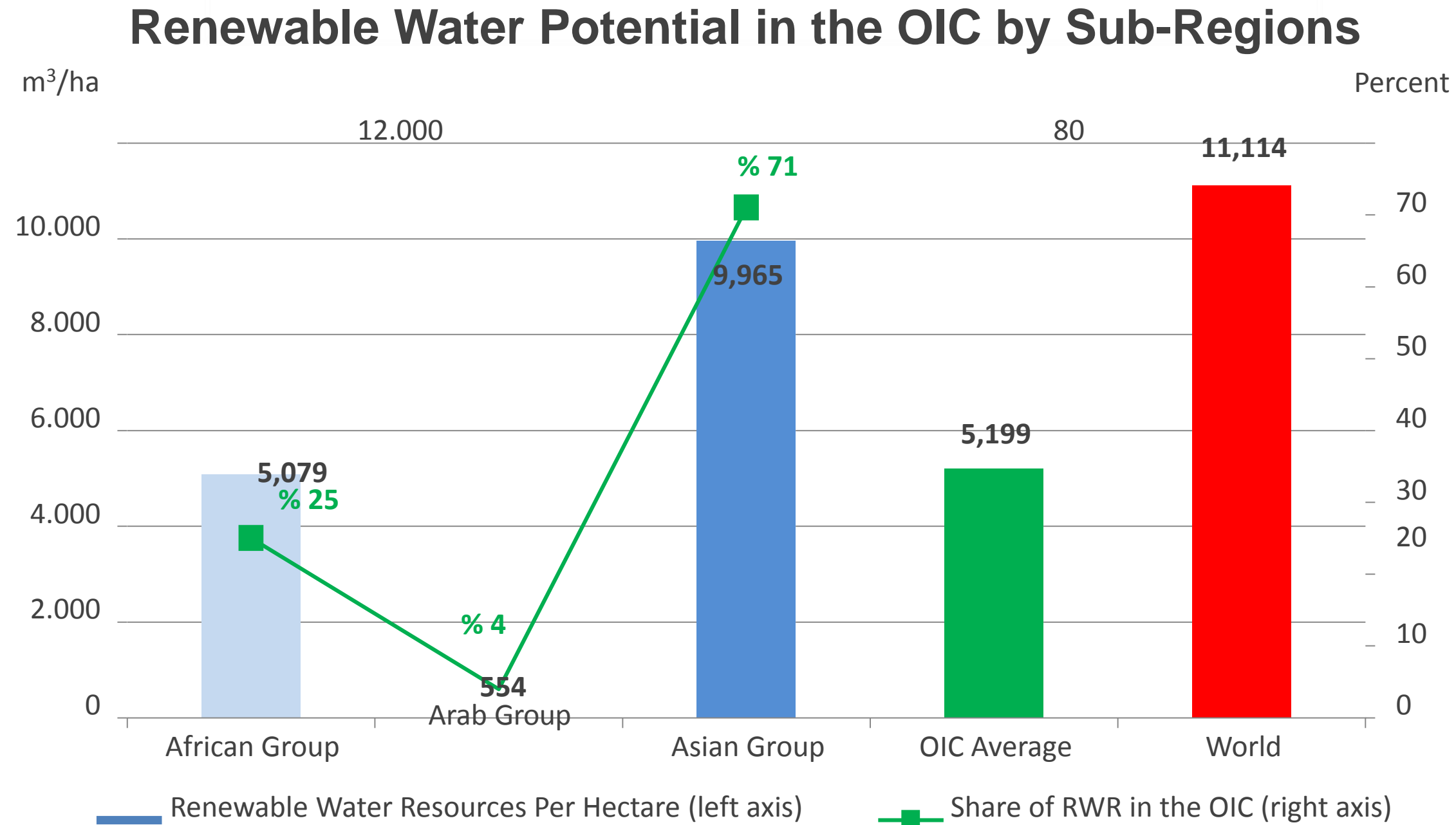
Fertilizer Use in the OIC and the World



Source: FAOSTAT

2. Sectorial Indicators

➤ Resource Use

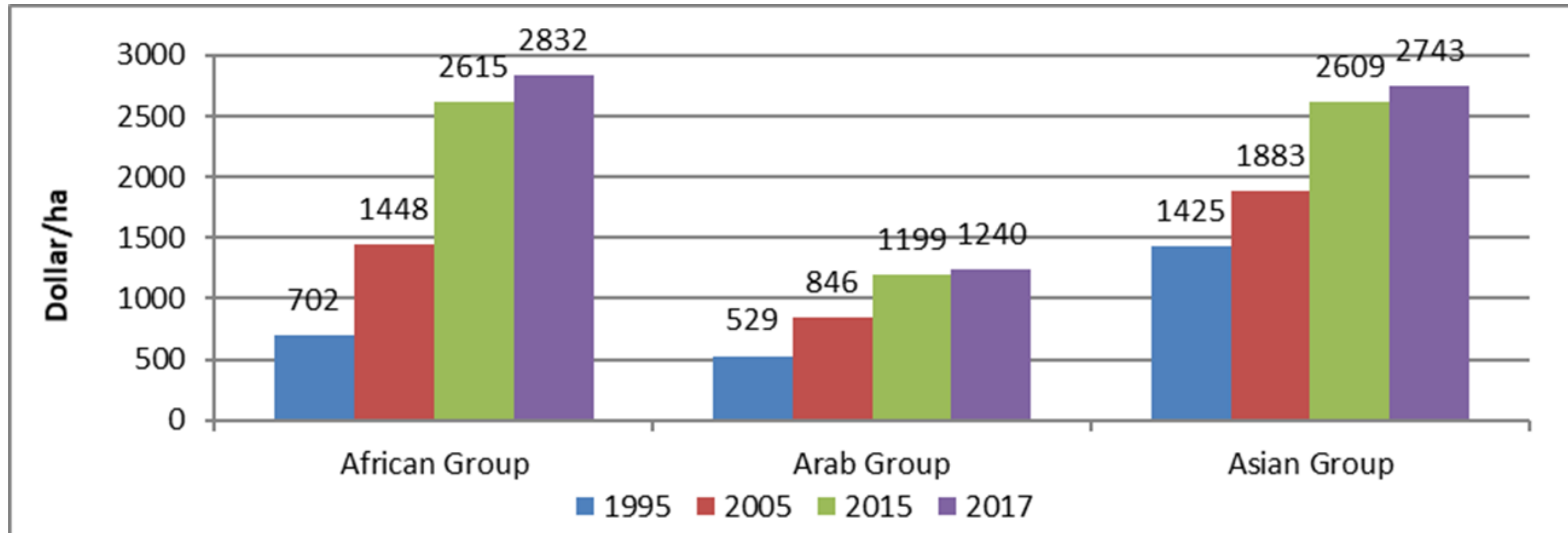


Source: AQUASTAT AND FAOSTAT

2. Sectorial Indicators

➤ Agricultural Productivity

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

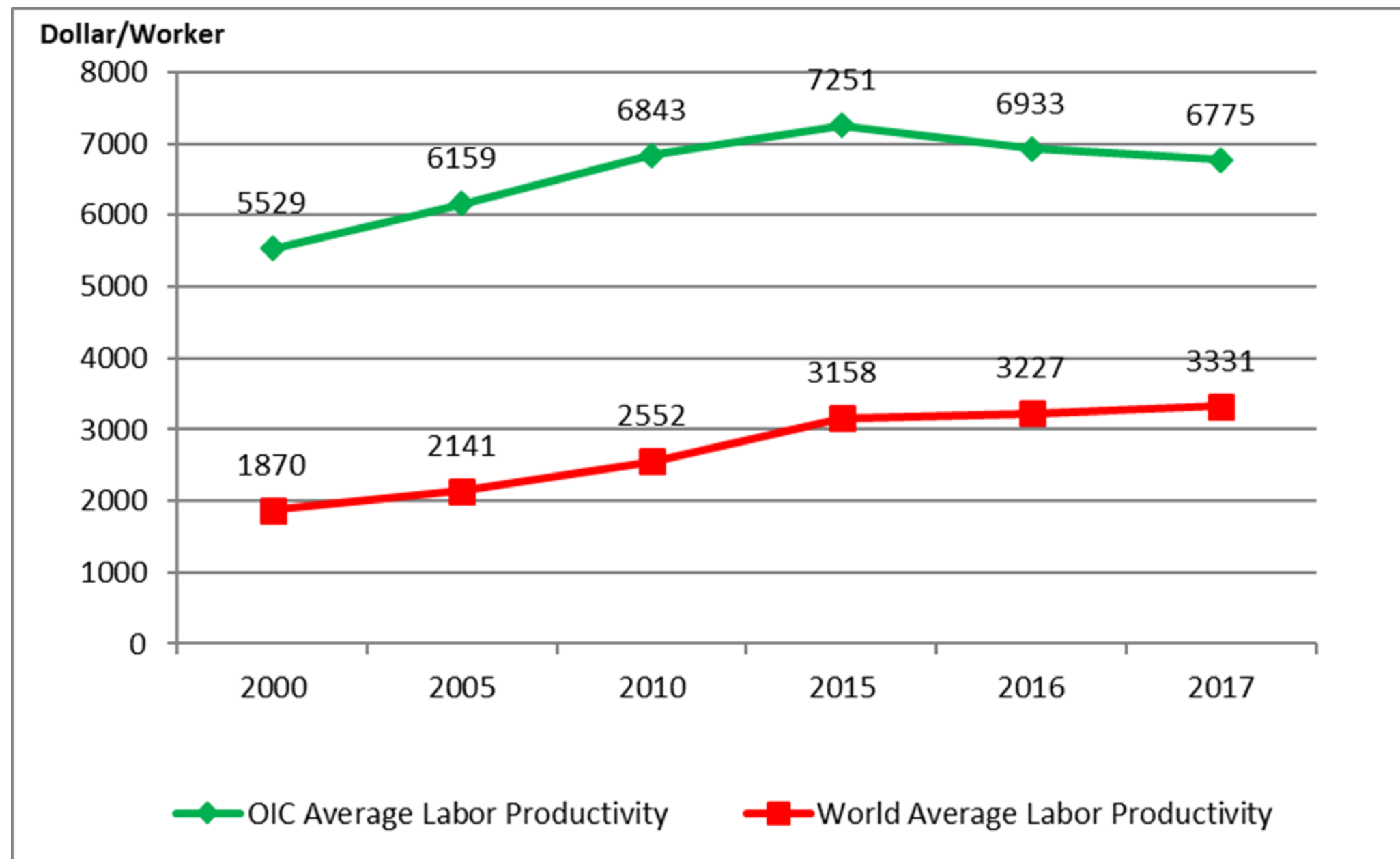


Source: FAOSTAT

2. Sectorial Indicators

➤ Agricultural Productivity

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



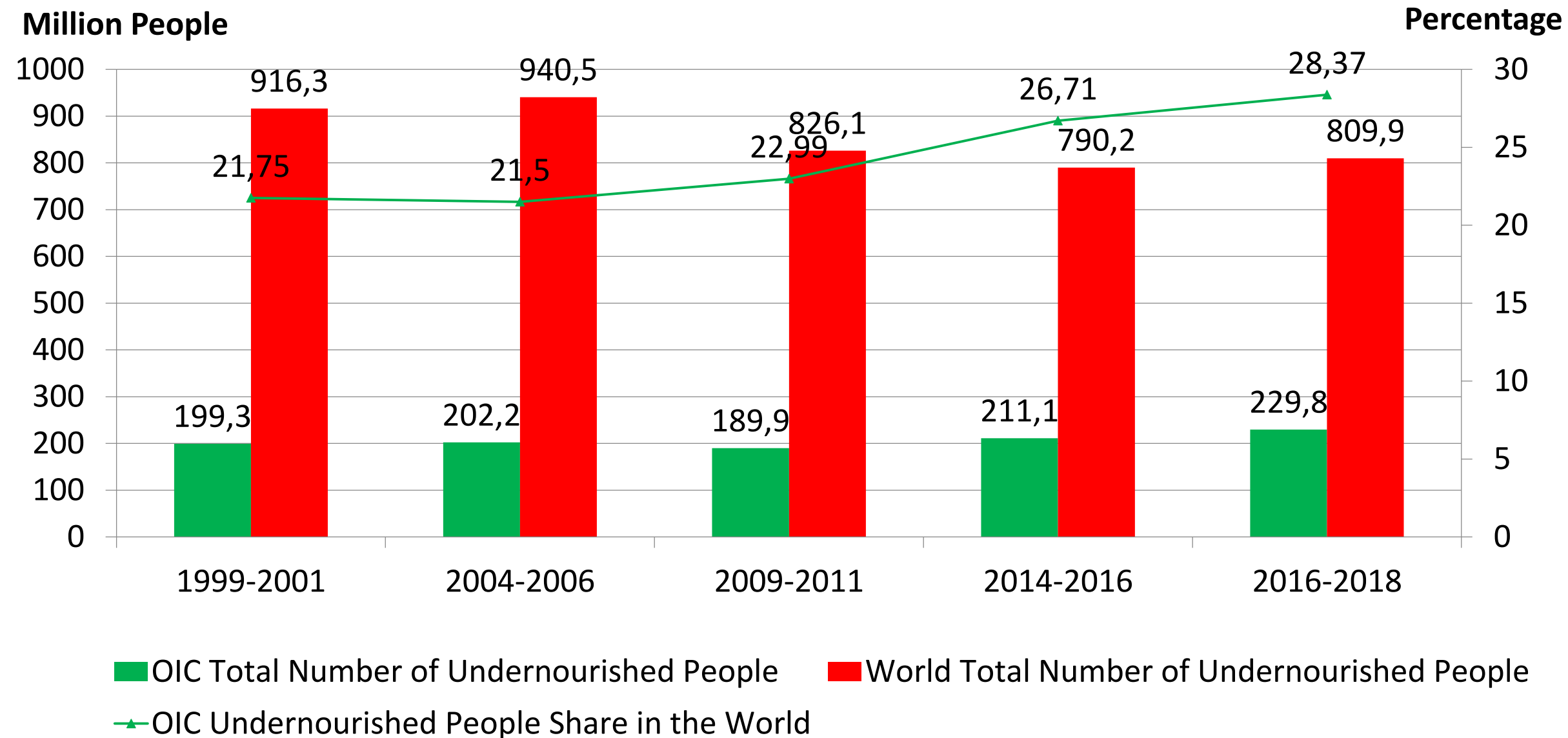
Source: FAOSTAT



3. The State of Food Insecurity

➤ Undernourishment

Undernourished People in the OIC and the World



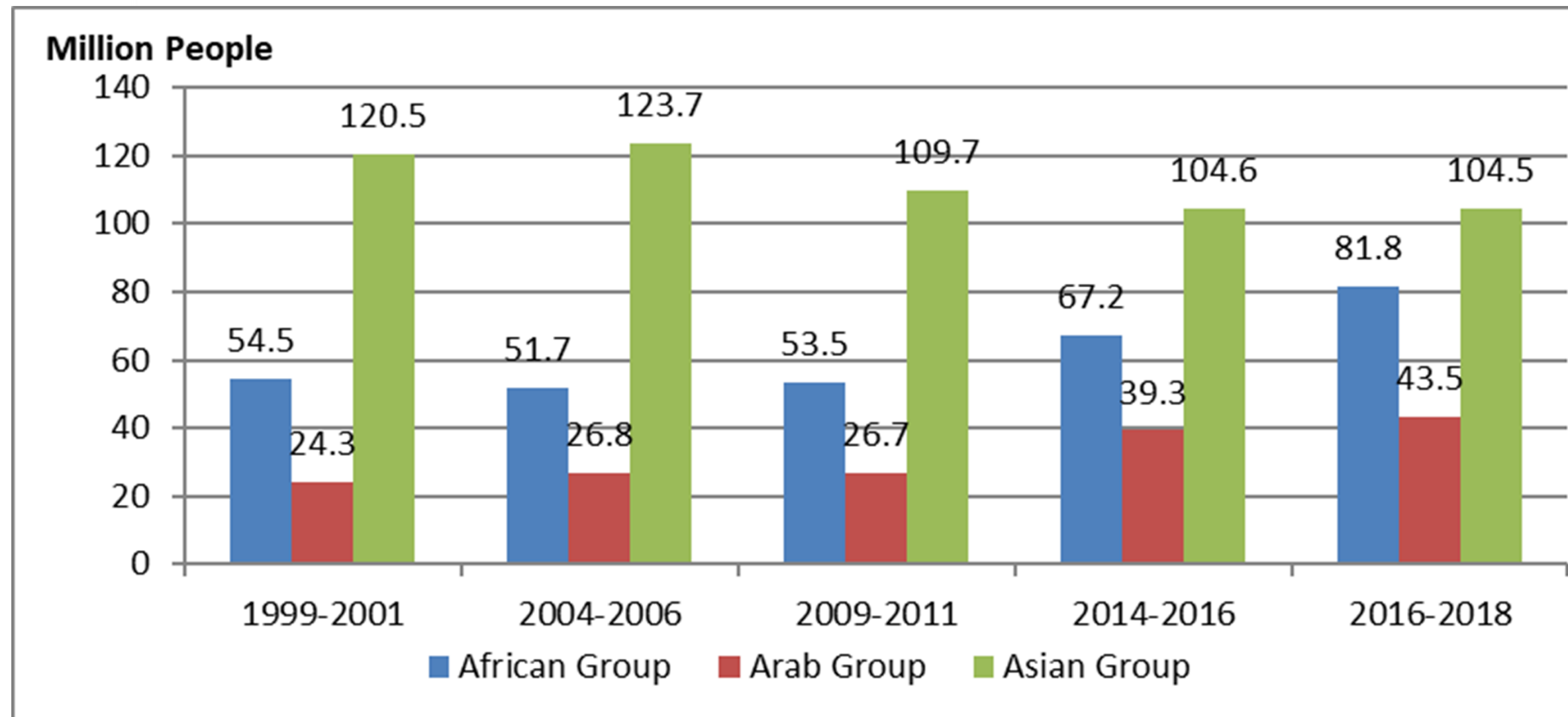
Source: Annex 38

Due to data availability, 25/57 OIC Member Countries are included.



3. The State of Food Insecurity

Undernourished People in the OIC Sub-Regions



Source: Annex 38



4. Climate Change and Food Insecurity in OIC

➤ Exposure

Cluster groups for Exposure Index (EI) scores

Cluster 1		Cluster 2	
Very low Exposure	Low Exposure	Very low Exposure	Low Exposure
(0-0,087)	(0,088-0,27)	(0,28-0,44)	(0,45-1,00)
Malta, UAE , Finland, Canada, Mongolia, Suriname , Kazakhstan , Norway, Russia, Botswana, Egypt , Sweden, Australia, Algeria , Congo, Mali , Mauritania , Brazil, Tunisia , Uzbekistan , Namibia, Ghana, Ukraine, Argentina, Zambia, Venezuela, Iran , Kuwait , Cote d'Ivoire , Cameroon , Tanzania, USA, South Africa, Morocco , Nigeria , Madagascar, Laos, Ethiopia, Mozambique , Saudi Arabia , Chile, China, Belarus, Denmark, Paraguay, Mexico, Jordan , Bolivia, Uruguay, Peru, Cambodia, Spain, Turkey , Estonia, Kenya, India, France, Togo , Germany, Colombia, Poland, Thailand, Latvia, Georgia UK, Malaysia	Indonesia , Armenia, Pakistan , Uganda , Hungary, Lithuania, Ecuador, Cuba, Afghanistan , Czech R., Greece, Italy, Nicaragua, Japan, Malawi, Panama, Lesotho, Kyrgyz Rep., Portugal, Vietnam, Romania, Lebanon , Honduras, Slovenia, Bulgaria, Slovakia, Austria, Swaziland, Dominican Rep., Albania , Moldova, Bosnia and Herzegovina, Croatia, Costa Rica, Netherlands	Fiji, Tajikistan , Senegal , Macedonia, Guatemala, Belgium, Philippines, Sri Lanka, Bangladesh	Nepal, Trinidad and Tobago, Cyprus, Jamaica, Switzerland, El Salvador, Rwanda, Mauritius

Source: Yeni F. and Alpas H., 2017



4. Climate Change and Food Insecurity in OIC

➤ Sensitivity

Cluster groups for Sensitivity Index (SI) scores

Cluster 1		Cluster 2	
<i>Low Sensitivity</i>	<i>Moderate Sensitivity</i>	<i>High Sensitivity</i>	<i>Very High Sensitivity</i>
(0-0,24)	(0,25-0,40)	(0,41-0,69)	(0,70-1,00)
UAE, Canada, Switzerland, Cyprus, Sweden, Slovakia, Norway, Finland, Australia, Russia, Austria, Croatia, USA, Slovenia, Latvia, Macedonia, Czech R, Belarus Moldova, Spain, Hungary, Brazil, Estonia, Chile, Germany, Bosnia and Herzegovina, Cuba, Fiji, Greece, Lithuania, Venezuela, Poland, Albania , France, Portugal, Argentina, Iran , UK, Romania, Kazakhstan , Bulgaria, Denmark, Malaysia , Saudi Arabia , Italy, Mexico, Colombia, Ukraine, Armenia, Georgia, Costa Rica, Kuwait , Tunisia , Turkey , Belgium, Lebanon (10)	Mauritius, Algeria , China, Kyrgyz Rep. , Uruguay, Jamaica, Panama, Ecuador, Jordan , Netherlands, Thailand, Japan, Morocco , Suriname , Uzbekistan , Peru, Honduras, Dominican Rep., Trinidad and Tobago, Paraguay, El Salvador, Indonesia , Malta, Nicaragua, South Africa (7)	Mongolia, Vietnam, Mauritania , Bolivia, Nepal, Sri Lanka, Philippines, India, Pakistan , Guatemala, Ghana, Senegal , Cameroon , Egypt , Cambodia, Mali , Botswana, Lao, Nigeria , Cote d'Ivoire , Lesotho, Togo , Bangladesh , Tajikistan , Kenya (11)	Uganda , Swaziland, Namibia, Afghanistan , Congo R, Tanzania, Madagascar, Rwanda, Malawi, Ethiopia, Mozambique , Zambia (3)

Source: Yeni F. and Alpas H., 2017



4. Climate Change and Food Insecurity in OIC

➤ Adaptive Capacity

Cluster groups for Adaptive Capacity Index (ACI) scores

Cluster 1		Cluster 2	
<i>Low AC</i>	<i>Moderate AC</i>	<i>High AC</i>	<i>Very High AC</i>
(0-0,27)	(0,28- 0,59)	(0,60-0,78)	(0,79-1,00)
Ethiopia, Togo, Mali, Mozambique , Tanzania, Madagascar, Kenya, Nigeria, Mauritania , Cambodia, Uganda, Afghanistan, Cote d'Ivoire , Malawi, Cameroon (9)	Rwanda, Ghana, Zambia, Congo Rep., Laos, Senegal , Lesotho, Nepal, Swaziland, Namibia, Mongolia, Nicaragua, India, Bangladesh , Bolivia, Pakistan , Botswana, Tajikistan , Fiji, Honduras, Indonesia , Guatemala (5)	Paraguay, Philippines, S. Africa, Morocco , El Salvador, Moldova, Kyrgyz Rep. , Peru, Algeria, Vietnam, Uzbekistan , Armenia, Albania , Dominican Rep., Belarus, Sri Lanka, Jamaica, Venezuela, Russia, Ukraine, Panama, Egypt, Tunisia, Kazakhstan , Colombia, Thailand, Iran , China, Ecuador, Brazil, Romania, Bosnia and Herzegovina, Macedonia, Argentina, Bulgaria, Suriname (9)	Turkey , Latvia, Mexico, Lithuania, Malaysia , Uruguay, Trinidad Tobago, Cuba, Lebanon, Poland, Estonia, Hungary, Mauritius, Croatia, Saudi Arabia, Jordan , Slovakia, Costa Rica, Czech Rep., Georgia, Slovenia, Kuwait , Finland, Malta, UK, Greece, Cyprus, Spain, Portugal, Belgium, Australia, UAE , Italy, Chile, Canada, Austria, Sweden, France, Germany, Denmark, Norway, USA, Netherlands, Switzerland, Japan (6)

Source: Yeni F. and Alpas H., 2017



4. Climate Change and Food Insecurity in OIC

➤ Vulnerability

Cluster groups for Vulnerability Index (VI) scores

Cluster 1		Cluster 2	
<i>Low VI</i>	<i>Moderate VI</i>	<i>High VI</i>	<i>Very High VI</i>
(0-0,25)	(0,26-0,50)	(0,51-0,75)	(0,76-1,00)
UAE, Norway, Canada, USA, Sweden, Australia, Finland, Chile, Denmark, Spain, Germany, France, Austria, UK, Kuwait , Greece, Italy, Portugal, Slovenia, Japan, Czech R, Estonia, Saudi Arabia , Malta, Georgia, Poland, Brazil, Slovakia, Latvia, Hungary, Russia, Netherlands, Argentina, Jordan , Mexico, Iran , Cuba, Kazakhstan , Malaysia , Lithuania, Belarus, Venezuela, Croatia, Turkey , Uruguay, Tunisia , Switzerland, Ukraine, China, Colombia, Lebanon , Suriname , Costa Rica, Romania, Cyprus, Belgium, Bulgaria (11)	Bosnia and Herzegovina, Thailand, Algeria , Ecuador, Armenia, Uzbekistan , Panama, Macedonia, Albania , Peru, Moldova, Morocco , Kyrgyz Rep. , S. Africa, Egypt , Paraguay, Dominican R., Vietnam, Fiji, Indonesia , Honduras, Trinidad and Tobago, Mongolia, Bolivia, Jamaica, Botswana, Nicaragua, India, Sri Lanka, Pakistan (8)	Philippines, Guatemala, Mauritius, Namibia, Ghana, El Salvador, Tajikistan , Laos, Mauritania , Cameroon , Lesotho, Congo Rep., Swaziland, Cote d'Ivoire , Senegal , Cambodia, Bangladesh , Nepal, Nigeria (7)	Mali , Kenya, Uganda , Afghanistan , Zambia, Malawi, Tanzania, Togo , Madagascar, Mozambique , Ethiopia, Rwanda (5)

* 31 out of 57 OIC Member States are highlighted.

Source: Yeni F. and Alpas H., 2017





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