

PRIVATE PARTICIPATION IN INFRASTRUCTURE IN OIC COUNTRIES



OIC Outlook Series

February 2012



ORGANISATION OF ISLAMIC COOPERATION
STATISTICAL, ECONOMIC AND SOCIAL RESEARCH
AND TRAINING CENTRE FOR ISLAMIC COUNTRIES

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(SESRIC)

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SESRIC

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Introduction

As main ingredient for sustainable development, good quality infrastructure plays a key role for determining the achievement of agricultural and manufacturing activities. Well-improved infrastructure decrease the costs of doing business, enables landlocked area to access markets, is crucial to improvements in agriculture, is a main enabler of integration and trade. With contribution of economic integration to developing areas, manufacturing and agriculture investments have galloping rise in addition to social and cultural development. Therefore, developing countries from all over the World make investments in transport, communication, energy and water infrastructure for economic integration and providing decent life standards

In regarding infrastructure profile of whole countries, developed countries in Europe and North America pursue well-developed infrastructure for decades with high level of GDP per capita and Human Development level. However, lack of infrastructure facilities in developing countries, especially poor Southern and Central Asia, and Sub-Saharan Africa hamper their growth potential and ability to trade because of weakened international competitiveness and adverse impact in poverty reduction.

Managing infrastructure projects is also very magnificent for fostering economic integration and socio-economic level, yet it obliges a country to have high technology, skilled labor and intermediary and raw materials. Large Private Enterprises with global trade network, well-improved accountability and corporate governance have triggered to manage massive and detailed operations better than state owned enterprises. Therefore, the responsibility in conducting huge projects shifted to private enterprises although most infrastructure have been implemented by

large state owned enterprises just several decades before. Therefore, Private Participation in Infrastructure (PPI) have become very prevailing especially in developing and least developed countries ,which suffer from low human capital, low technology level and lack of intermediary material.

Demand for increasing infrastructure network in Developing Countries under different socio-economic, geographic and financial conditions has lead to variation in contract deal types. To attract businesses for extension of certain services and infrastructure facilities such as water supply, public parks and sport arenas, government can provide territory under relevant initiatives and promotions through Concession contract. What is more, governments can prefer drop of certain businesses under divestiture contract because of economic decentralization policies. Greenfield projects are also widely arranged contracts since they are based on additional construction and development of prior works with technologically advanced tools and instruments such as Wireless Lan and telephone network. Therefore, there is not any requirement of having large territories to implement an infrastructure project in Greenfield Projects .Finally, Management and Lease contract can be considered different from other contracts since unlike the other contracts , Management and Lease contract oblige public to make investment in despite of leaving the operation right to company for collecting revenue on behalf of themselves.

To analyze massive impact of Private Participation in Infrastructure in low and middle income countries between 1990 and 2011 through sector by sector, private participation in energy infrastructure investment has occurred in 105 countries that 64% of projects are based on greenfield projects ,have reached more than \$2 trillion as financial closure with gradually rising values of projects. In the communication sector, the projects have been implemented in more than 130 countries with around US\$800 million of total investment whose %37 was spent on Latin America and the Caribbean countries. What is more, about \$1,3 trillion has been invested through private investment in transport infrastructure among nearly 90 countries. What is more, 55% of total investment has taken place by Concession contracts. Finally, water and sewerage investments have been implemented in 62 countries with having lowest investments of \$ 743 million. Concession contracts covered the largest amount of private activity explaining 61% of water and sewerage infrastructure investment.

Considering trend of private infrastructure investment in Developing Countries, some OIC countries facing inefficiency in operational performance because of unskilled labor and low technology level are especially obliged to rely on private participation in infrastructure for improving growth performance and developing socio-economic status.

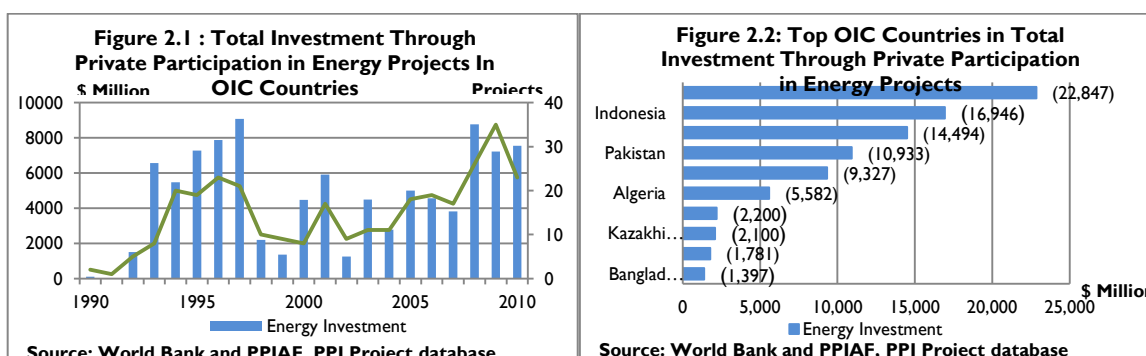
The reports analyses the tendency of private participation in infrastructure in Developing OIC Member Countries between 1990 and 2010 and compare the position of OIC Countries with Non-OIC Countries for making evaluations on number of projects, total investments and project deal types. However, to observe the position of OIC Member countries compared with developing Non-OIC Countries, one more indicator, *Non-OIC excluding BRIC (involving Non-OIC Countries by excluding Brazil ,Russia, India, and China)*, has been taken into account to have more plausible

and consistent analysis because BRIC Countries are at similar stage of very advanced economic development with large population which induces marked differences in amount of private participation in infrastructure and number of projects.

Finally, a Statistical Appendix, which indicate whole dataset covering amount of total investment and number of projects by deal types between 1990 and 2010 through private participation in energy, telecom, transport and water and sewage infrastructure in developing OIC countries will be attached to introduce the detailed overall private participation in infrastructure (PPI) performance of OIC Member Countries.

Private Participation in Energy Infrastructure

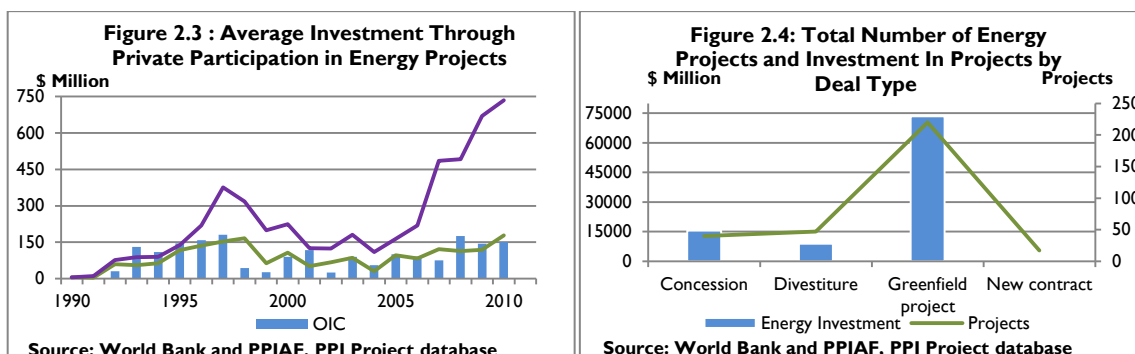
Energy Infrastructure which covers the natural gas and electricity generation, transmission and distribution, brings magnificent contribution to socio-economic development and economic integration in global energy sector. Between 1990 and 2010, private participation in energy infrastructure projects reached contractual or financial closing in fifty developing OIC Countries, comprising investment commitments of \$98.1 billion by totally 321 projects.



Investment in OIC Countries between 1990 and 2010 was concentrated in five countries explaining 76% of total private participation in energy infrastructure. Turkey was the top recipient by 65 projects and \$22.8 billion, 23% of the regional investment (Figure 2.2). Indonesia, Malaysia, Pakistan and Morocco followed, and those countries represented 61% of regional investment through 117 conducted projects. Notwithstanding the private investment in higher middle income OIC Countries, thirteen countries located in Central Asia and Sub-Saharan Africa had reported no energy infrastructure project at all. The Investment went to mainly electricity infrastructure through 274 projects and \$83 billion, whereas only 47 projects for natural gas infrastructure were implemented, involving regional investment of \$15 billion.

Total private investment has increased three-times on OIC region in 1993 with the impact of private activities in Morocco, Malaysia and Algeria involving investment commitment of \$5.9 billion, 90% regional private investment (Figure 2.1). After rising tendency of private investment in energy infrastructure between 1994 and 1997, the implemented number of projects saw fall by 50% compared with 1997 explained by large decline in investments of leading OIC Countries. With the global credit expansion between 2003 and 2007, large energy projects began to be

implemented in OIC Member Countries again, yet private investment in 2008 had a sharp slowdown after global financial shrinking.

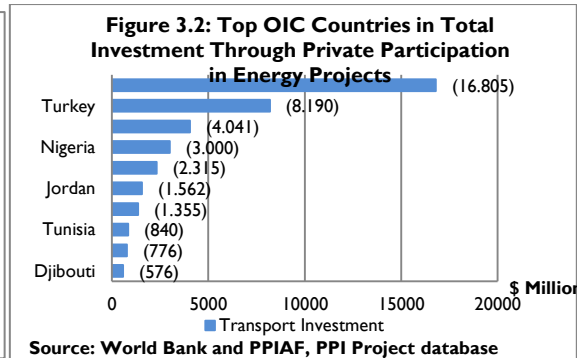
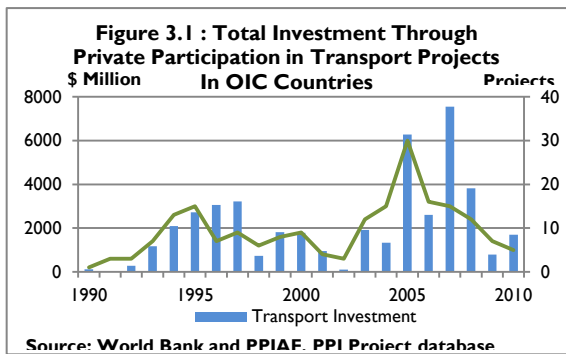


Between 1990 and 1996, OIC , Non-OIC and Non-OIC Countries excluding BRIC have indicated similar progress of development in private infrastructure investment. However, with enormous growth in private activity in BRIC Countries in 1996 and 1997, average Non-OIC investment has sharply ascended since India, Russia, China, and Brazil spent totally \$21.9 billion for regional investment which is more than \$13.3 billion total investment of other Non-OIC Countries (Figure 2.3). However, after drastic fall in investments in BRIC Countries after 2007 and comparatively low private activity level in the rest of Non-OIC Countries, the average investment through PPI has declined from \$375 million in 1997 to \$125 million in 2001 in Non-OIC Countries similar to fall in Non-OIC Countries excluding BRIC. With \$52 billion-private investment in BRIC Countries, average investment in Non-OIC Countries saw a gigantic rise from \$110 million in 2004 to \$735 in 2010. Although OIC Member countries had ongoing competitiveness in private participation in energy infrastructure with Non-OIC Countries excluding BRIC, the average investment gap between OIC and Non-OIC countries considerably enlarged gradually especially after magnificent growth of private activities in BRIC Countries in 1994.

The private investment was concentrated on greenfield projects which account for 75% for regional investment with \$74.4 billion and totally 220 projects (Figure 2.4). Concessions were the second most widespread type of private participation accounting for \$15.5 billion in investment ,16% of the regional total between 1990 and 2010.Although divestiture projects involves seven more projects than the concessions ,its contribution has reached only \$8.9 billion, explaining 9% of regional investment.

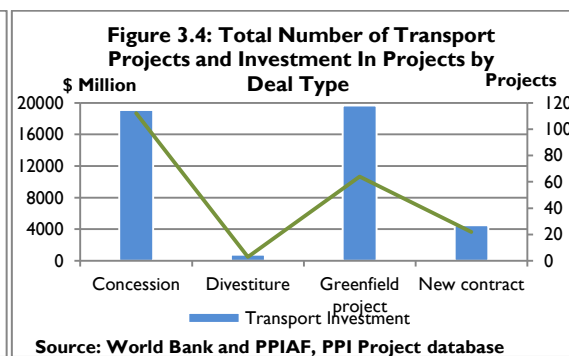
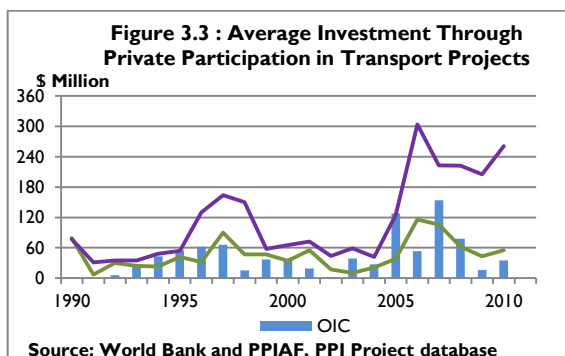
Private Participation in Transport Infrastructure

Transport Infrastructure which consists of the airport runways and terminals, railways, toll roads, bridges, highways, and tunnels, port infrastructure, terminals, superstructures, and channels, plays a key role for economic integration and providing decent life standards in poor areas through improving freight industry and transfer of agricultural, manufacture products, raw and intermediary materials. Transport Infrastructure projects with private activity arrived contractual or financial closing in developing OIC Countries, involving investment commitments of \$44.1 billion with totally 201 projects between 1990 and 2010.



From 1990 to 2010, private participation in transport Infrastructure in OIC Countries was concentrated mainly in two countries, Turkey and Malaysia, explaining 56% of total private transport infrastructure investment in region under 64 projects (Figure 3.2). Malaysia received the largest amount of private investment by implementing 38% of regional projects on OIC Member Countries with \$16.8 billion. Conducted private transport infrastructure investment in Turkey represented 18.3% of regional investment with \$8.1 billion. Despite major private participation in leading OIC Countries, eighteen countries located in Central Asia and Sub-Saharan Africa has reported no transport infrastructure project between 1990 and 2010. As private activity in subsectors, the private investment went mainly to seaport sector involving \$16.5 billion, 40% of regional investment. Airport infrastructure with 31 projects reaching investment commitment of \$10.5 billion was second most common subsector. Recipient from investments on Rail Road and Road was totally \$14.5 billion at similar proportion.

There is a progressive growth in private investment until 1997 through high private participation in Malaysia which accounts for 69% of regional investment with approximately \$2.2 billion annual investment (Figure 3.1). With the slowdown of private activities in leading OIC countries, especially Malaysia and Turkey, annual private investment less than \$2 billion until 2005. However, with the stimulus impact of Turkey, Nigeria and Indonesia during 2005 and 2007 with totally \$ 9.4 billion in private investment explaining in 71% of regional investment, total private activity among OIC Member Countries had a enormous rise from \$1.3 to \$6.2 and \$7.5 billion. In regarding fall in number of projects after 2007, it is perceptible that comprehensive big projects commenced to be implemented in leading OIC Countries. With the drastic fall in private activities in outstanding OIC Countries, the total annual investment declined until \$1.6 billion in 2010.

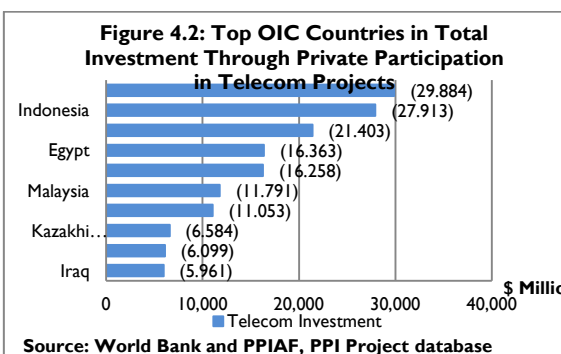
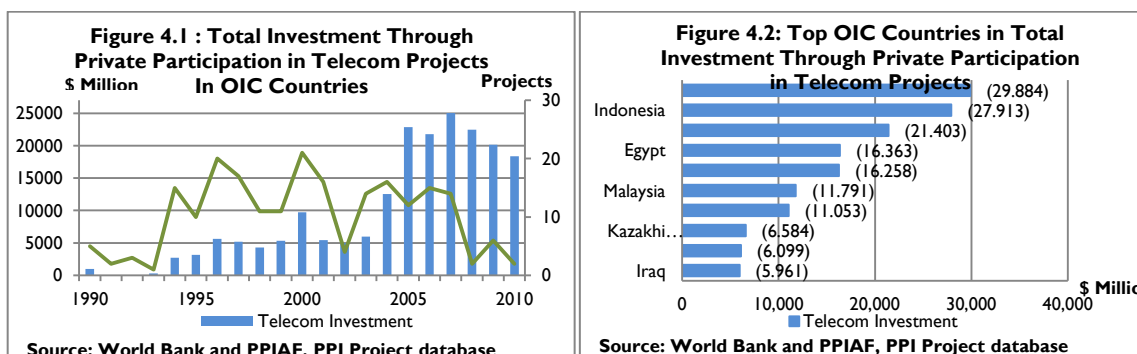


OIC, Non-OIC and Non-OIC Countries excluding BRIC have displayed investment growth in infrastructure at similar slow rate between 1990 and 1995 (Figure 3.3). Nonetheless, with the shift of the private investments to BRIC Countries during 1995, although Non-OIC Countries excluding BRIC had total investment commitments of \$3 billion, Brazil and China in sequent had \$4.3 and \$5 billion as private investments in transport infrastructure projects. Therefore, drastic rise in average investment was seen in Non-OIC Countries while OIC and Non-OIC Countries excluding BRIC maintained two-fifth of investment in Non-OIC region. With the sharp fall of private activities in BRIC Countries since 1999, average transport infrastructure investment was less than \$60 million annually until 2004. With credit expansion trend in all over the World during early 2000s, BRIC Countries again saw a high growth in private activity. While the total investment of OIC Countries excluding BRIC peaked to \$10.7 billion in 2006, India and China had totally \$18.1 billion for transport infrastructure investment. However, during credit crunch between 2007 and 2010, private investment level had rapid downturn in all over the World.

Investment in OIC Countries were majorly concentrated on both concession and greenfield project contracts at similar ratio, involving 176 projects with investment commitment of totally \$38 billion, accounting for 89% of regional investment (Figure 3.4). Management and Lease contracts explained 10% of private activity conducted by 22 projects while divestiture contracts had only 3 projects in very small amount of investment.

Private Participation in Telecom Infrastructure

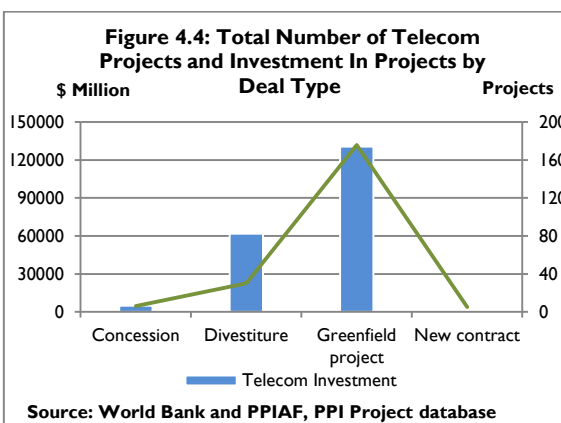
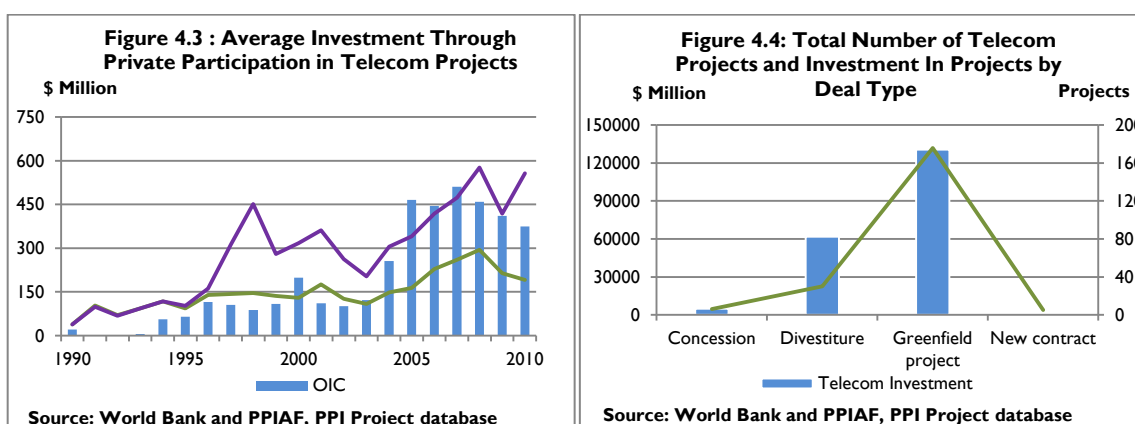
Telecom Infrastructure which involves fixed or mobile local telephony, domestic long distance telephony, international long-distance telephony is very significant part of socio-economic development and economic integration with the strong role IT Technology and E-commerce in doing business. Between 1990 and 2010, telecom infrastructure projects with private activity reached contractual or financial closing in developing OIC Member Countries, covering investment commitments of \$197.1 billion through conducted 217 projects.



Between 1990 and 2010, investment in OIC Countries was majorly located in five countries accounting for 56% of total telecom infrastructure investment. Turkey was the leading country with \$29.8 billion, 15% of regional private investment. Indonesia, Nigeria, Egypt and Pakistan followed, and these four countries together represented 39% of regional investment by implementing 48 projects (Figure 4.2). Nearly all OIC Member countries had private participation

in Telecom Infrastructure sector since telecom infrastructure projects require degree of technology and skilled labor to implement projects.

Over two decades, private activity in telecom infrastructure has indicated substantial and sustained growth in OIC Countries. With the rising private investment firstly in Malaysia and Indonesia, then shifting to Turkey and Morocco explained 77% of regional investment and private investment in OIC Countries was totally \$51 billion-project in telecom infrastructure until 2003(Figure 4.1).With the impact of increasing private participation in Nigeria and Pakistan which accounts for 41% of annual rise of the investment, private activity has scaled up from \$6 billion in 2003 to \$22.8 billion in 2006. More and more massive investments in telecom infrastructure have placed in developing OIC Countries since 2005 with recent wide-ranging technological improvement in telecom sector and its necessity for socio-economic development and economic integration.

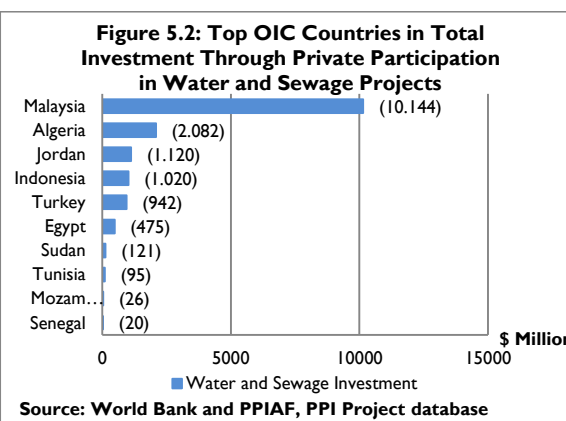
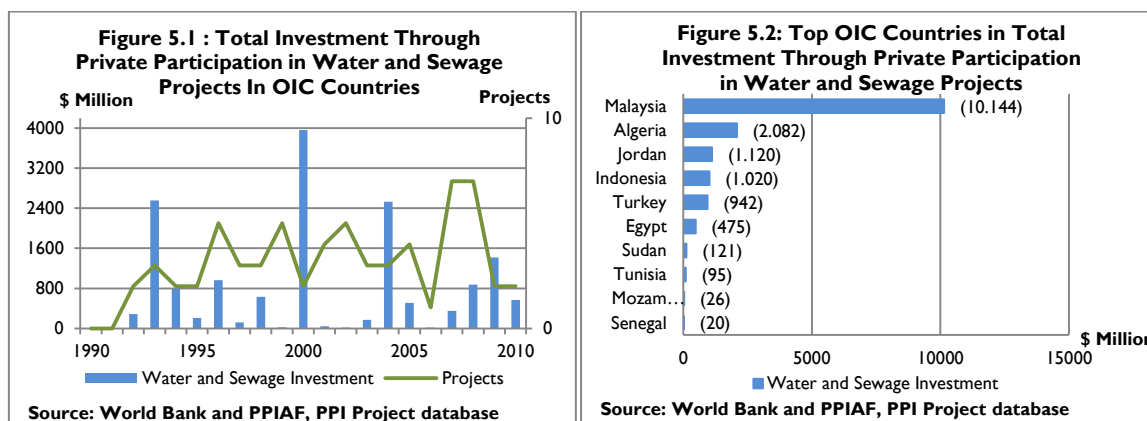


OIC, Non-OIC and Non-OIC Countries excluding BRIC have indicated similar annual average investment level ,gradually increasing to \$150 million until 1996.However, with the acceleration of private activities in telecom infrastructure in BRIC Countries, Non-OIC average investment has tripled from \$161 million in 1996 to \$451 million during 1998.Moreover,\$43 billion private activity in Brazil accounted for %73 of drastic growth in regional investment (Figure 4.3). Private investment has continued with annually \$310 million as average in Non-OIC countries from 1996 to 2005 although Non-OIC Countries excluding BRIC saw annually maximum \$176 million during the same period. This fact displays the density in private activities in telecom infrastructures in BRIC Countries. Sharp increase in private investment in OIC Member and Non-OIC Countries since 2005 has shifted the direction of competition region from Non-OIC Countries excluding BRIC to Non-OIC Countries.

The private activity in telecom infrastructure was concentrated on greenfield projects which explains 66% for regional investment with \$130.4 billion and totally 176 projects from 1990 to 2010 (Figure 4.4). Divestiture contracts were the second most prevailing type of private participation accounting for \$61.6 billion by 30 implemented projects, 31% of the regional total. Management & lease and concession contracts represent only 2% of the investment in OIC countries.

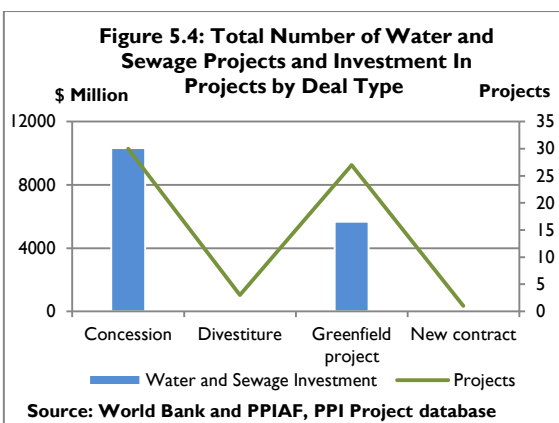
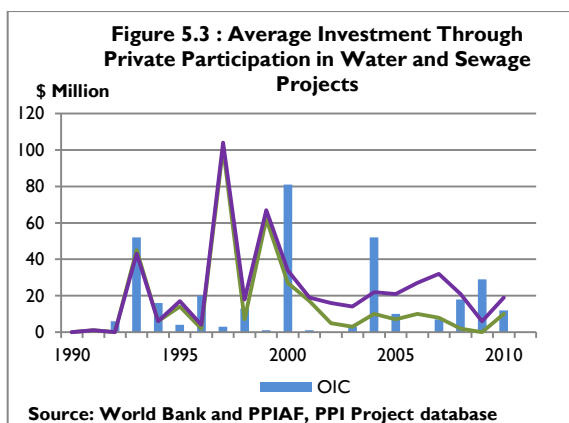
Private Participation in Water and Sewage Infrastructure

Through involving potable water generation, distribution and sewerage collection and treatment, water and sewage infrastructure is substantial factor for determining the achievement of agricultural and manufacturing activities in addition to providing the decent life standards for social development. Water and Sewage Infrastructure projects with private investment reached contractual or financial closing in developing OIC countries, comprising investment commitments of \$16 billion with totally 65 projects since 1990.



Private participation in water and sewage Infrastructure in OIC Member Countries has been implemented mainly in Malaysia under 16 projects, explaining 63% of regional investment. Algeria, Jordan, Indonesia and Turkey together accounted for 31% of private activity in OIC countries with totally \$5.1 billion investment (Figure 5.2). Thirty-eight OIC Countries, on the other hand, had no water and sewage projects through private participation. Private investment went to mainly water utilities by \$9.2 billion, 58% of regional investment. Second most common invested subsector was treatment plant with \$4.7 billion.

From 1990 to 2010, water and sewage investment was highly volatile by springing from dense private activities in certain leading OIC Countries, especially Malaysia, Algeria and Jordan. Therefore, certain annual investment had drastic growth. Private activities in Malaysia during 1993, 2000 and 2004 with totally \$9.1 billion investment explained 99% of gigantic growth during these years (Figure 5.1). Respectively lower growth during 1996 and 2009 have occurred through the private investment in Turkey, Algeria and Jordan with totally \$2.4 billion which accounts for 100% of regional investment.



Similar to OIC region, annual private investment in Non-OIC region was highly correlated with private activity in certain countries between 1990 and 2010. Therefore, annual private activity level was also highly volatile in Non-OIC and Non-OIC Countries excluding BRIC. Non-OIC and Non-OIC excluding BRIC countries saw similar average private participation level until 2001 because of low investment level in BRIC Countries. Non-OIC Countries saw a high growth during 1993 and 1996 with total investment of \$11.5 billion in Philippines and Argentina accounting for 87% of regional investment (Figure 5.3). Moreover, \$4 billion private participation level in Chile explained the 81% of growth in annual average investment in Non-OIC region during 1999. With accelerating private investment level in BRIC Countries between 2006 and 2010, the private activity gap between Non-OIC and Non-OIC Countries excluding BRIC enlarged. While \$5.8 billion was spent to finance water and sewage projects in BRIC Countries, other Non-OIC countries invested only \$850 million in the region as private investment between 2006 and 2010.

Investment in OIC region was mostly dominated in concession contracts involving \$10.3 billion, 63% of regional investment with 30 projects (Figure 5.4). Second most implemented projects were greenfield projects with 5.6 billion. Rest of financial contracts had respectively very low amount of investment.

Conclusion and Policy Recommendation

In regard of Developing Countries, poor state-enterprises face with low technology level, high cost of unskilled labor and lack of intermediary materials were not able to implement enough infrastructure projects for long years. However, in parallel with accumulation of private participation in infrastructure projects in low and middle income Countries, improved infrastructure not only contributed to economic growth, but it is also very crucial input to human development. The large amount of private investment in infrastructure has been observed especially in comparatively leading industrial countries since developing countries possessing high human capital level, industrial level and wide ranging resources have large return from investment in infrastructure for social and economic development as well as owning strong budget to finance infrastructure projects.

As developing OIC Member Countries, infrastructure sector ,consisting of power, transport, water, irrigation and sanitation, and communication and information technology, had 805 projects in fifty countries and private investment of \$355.3 billion between 1990 and 2010. \$197 billion in OIC Countries was utilized to finance telecom infrastructure projects, accounts for 55% of regional investment. Second most financed sector was energy infrastructure involving \$98.1 billion private investment with 321 projects. Transport and water infrastructure investment reached to totally \$60.2 billion explaining insignificant portion of regional private activity.

Malaysia, Turkey and Indonesia among fifty countries are leading OIC Countries through conducting 274 infrastructure projects, involving private investment of \$165 billion, %46 of regional investment. Having higher income level, human capital accumulation and better doing business conditions have promoted private investments in infrastructure for increasing socio-economic conditions and improving economic integration. Many OIC Countries in Sub-Saharan Africa and Central Asia, on the other hand, lag behind its peers with regarding private investment in infrastructure.

Greatest progress has been maintained through greenfield projects by investment commitment of \$229 billion, accounting for 64% of regional investment since telecom and energy infrastructures as leading developing sectors focus more on additional construction and improvement of prior work .With impact of spreading economic decentralization policy, divestiture contracts were second most widespread deal type in private participation involving investment of \$71 billion, 20% of total investment in OIC Member Countries. Despite implementing 805 infrastructure projects, 69 projects were cancelled or distressed in OIC Member Countries.

Whereas fostering water and energy infrastructure accelerate efficiency in agricultural and manufacture production, improving telecom and transport infrastructure is also strengthening economic integration of poor and landlocked areas. Having higher industrial and income level, on the other hand, are also promoting the density of private infrastructure projects in an emerging country for increasing growth and developing operational performance.

Having improved coordination among government and private enterprises and institutions is main principle for having higher return from existing infrastructure and developing infrastructure in a country. Therefore, a set of missions fall to government institutions, state-owned and private enterprises for having efficient infrastructure with high revenue and developing private participation in infrastructure;

- Infrastructure efficiency related investments should be prioritized for high returns they bring. Therefore, applying low-cost technology in infrastructure projects and having reforms in institutions for improving operational performance in income distribution, collection of revenue and determining the staff number are significant investment areas for increasing infrastructure efficiency.
- Having greater safeguarding maintenance expenditure can inhibit waste in infrastructure spending springing from additional new infrastructure investments because rehabilitation

and preservation of infrastructure assets more likely bring higher return than affording to obtain new technological instruments and intermediary materials.

- Having regulatory and administrative reforms through decreasing freight tariff and promoting multimodal transportation networks can improve economic integration of an area and hence, bring higher return through accessibility to trade channels.
- Many developing OIC Countries are too small to develop infrastructure on their own. Therefore, integrating energy, water and transport infrastructure to urban regions and more developed countries will be more efficient investment through reducing cost of making trade and enabling people to have access to large markets.
- Institutional reforms through improving governance and accountability in state-owned and private enterprises can reduce inefficiency of operational performance in enterprises.

A.1: Private Participation In Energy Infrastructure

Country	Total Number of Energy Projects by Deal Types					Total Investment In Energy Projects By Deal Type (\$ Million)				
	Concession	Divestiture	Greenfield Projects	Management & Lease Contract	Total Number of Projects	Concession	Divestiture	Greenfield Projects	Management & Lease Contract	Total Investment In Projects
Afghanistan	0	0	1	0	1	0	0	2	0	2
Albania	1	4	1	0	6	8	420	272	0	700
Algeria	0	0	5	0	5	0	0	5.582	0	6
Azerbaijan	3	0	0	0	3	375	0	0	0	375
Bangladesh	0	3	18	0	21	0	49	1.348	0	1
Benin	0	0	1	0	1	0	0	590	0	590
Burkina Faso	0	0	1	0	1	0	0	6	0	6
Cameroon	1	0	2	0	3	532	0	469	0	1.001
Chad	0	0	0	1	1	0	0	0	0	0
Comoros	1	0	0	0	1	0	0	0	0	0
Cote d'Ivoire	1	0	3	0	4	40	0	331	0	371
Djibouti	0	0	0	0	0	0	0	0	0	0
Egypt	0	0	5	0	5	0	0	1.781	0	1.781
Gabon	1	0	2	1	4	294	0	0	0	294
Gambia	0	0	0	2	2	0	0	0	0	0
Guinea	1	0	0	0	1	36	0	0	0	36
Guinea-Bissau	0	0	0	1	1	0	0	0	0	0
Guyana	0	1	0	0	1	0	50	0	0	50
Indonesia	0	2	30	1	33	0	729	16.227	0	16.946
Iran	0	1	2	0	3	0	0	650	0	650
Iraq	0	0	2	0	2	0	0	590	0	590
Jordan	0	2	2	0	4	0	224	765	0	989
Kazakhstan	2	22	0	2	26	623	1.478	0	0	2.101
Kyrgyz Republic	0	0	0	0	0	0	0	0	0	0
Lebanon	0	0	0	0	0	0	0	0	0	0
Libya	0	0	0	0	0	0	0	0	0	0
Malaysia	0	4	22	0	26	0	3.805	10.689	0	14.494
Maldives	0	0	0	0	0	0	0	0	0	0
Mali	1	0	0	1	2	366	0	0	0	366
Mauritania	0	0	0	0	0	0	0	0	0	0
Morocco	5	0	3	0	8	6.606	0	2.721	0	9.327
Mozambique	1	0	1	0	2	5	0	1.201	0	1
Niger	0	0	0	0	0	0	0	0	0	0
Nigeria	1	1	7	0	9	238	280	1.682	0	2.201
Pakistan	0	4	46	0	50	0	1.701	9.232	0	10.933
Palestine	0	0	0	0	1	0	0	150	0	150
Senegal	1	0	4	0	5	65	0	174	0	239
Sierra Leone	0	0	1	0	1	0	0	1	0	1
Somalia	0	0	0	0	0	0	0	0	0	0
Sudan	0	0	0	0	0	0	0	0	0	0
Suriname	0	0	0	0	0	0	0	0	0	0
Syria	0	0	0	0	0	0	0	0	0	0
Tajikistan	1	0	0	0	1	16	0	0	0	16
Togo	1	0	2	1	4	68	0	780	0	848
Tunisia	0	0	4	0	4	0	0	948	0	948
Turkey	13	2	44	6	65	6.157	222	16.262	205	22.847
Turkmenistan	0	0	0	0	0	0	0	0	0	0
Uganda	4	0	8	0	12	102	0	1.012	0	1.115
Uzbekistan	0	0	0	0	0	0	0	0	0	0
Yemen	0	0	2	0	2	0	0	16	0	16
OIC Countries	39	46	219	16	321	15.531	8.958	73.481	205	89.991
Non-OIC Countries	162	354	1.178	12	1.706	74.265	96.742	310.852	156	482.015
Non-OIC excl. BRIC	79	189	438	4	710	24.938	42.580	102.869	0	170.387
World	201	400	1.395	28	2.027	89.796	105.700	384.333	361	572.006

Source: World Bank and PPIAF, PPI Project database

A.2: Private Participation In Telecom Infrastructure

Country	Total Number of Telecom Projects by Deal Types					Total Investment In Telecom Projects By Deal Type (\$ Million)				
	Concession	Divestiture	Greenfield Projects	Management & Lease Contract	Total Number of Projects	Concession	Divestiture	Greenfield Projects	Management & Lease Contract	Total Investment In Projects
Afghanistan	0	0	6	0	6	0	0	1.737	0	1.737
Albania	0	2	2	0	4	0	648	700	0	1.348
Algeria	0	0	3	0	3	0	0	5.585	0	5.585
Azerbaijan	0	0	4	0	4	0	0	1.889	0	1.889
Bangladesh	0	0	12	0	12	0	0	6.099	0	6.099
Benin	0	0	5	0	5	0	0	911	0	911
Burkina Faso	0	1	2	0	3	0	573	449	0	1.021
Cameroon	0	1	1	0	2	0	868	474	0	1.342
Chad	0	1	3	0	4	0	303	301	0	604
Comoros	0	0	0	0	0	0	0	0	0	0
Cote d'Ivoire	0	1	4	0	5	0	760	1.331	0	2.092
Djibouti	0	0	0	0	0	0	0	0	0	0
Egypt	0	2	4	0	6	0	5.734	10.629	0	16.363
Gabon	0	1	3	0	4	0	93	345	0	439
Gambia	0	1	2	0	3	0	35	7	0	42
Guinea	0	1	5	0	6	0	130	354	0	484
Guinea-Bissau	0	0	2	0	2	0	0	114	0	114
Guyana	0	1	1	0	2	0	177	37	0	214
Indonesia	5	3	9	0	17	4.825	12.438	10.651	0	27.913
Iran	0	1	4	0	5	0	370	2.345	0	2.715
Iraq	0	0	4	0	4	0	0	5.961	0	5.961
Jordan	0	1	4	0	5	0	1.224	1.398	0	2.622
Kazakhstan	0	1	4	0	5	0	3.455	3.129	0	6.584
Kyrgyz Republic	0	1	6	0	7	0	97	145	0	243
Lebanon	0	0	2	3	5	0	0	674	0	674
Libya	0	0	0	0	0	0	0	0	0	0
Malaysia	0	1	6	0	7	0	3.184	8.608	0	11.791
Maldives	0	0	1	0	1	0	0	52	0	52
Mali	0	1	1	0	2	0	460	460	0	920
Mauritania	0	1	1	0	2	0	237	121	0	358
Morocco	0	1	2	0	3	0	7.505	3.548	0	11.053
Mozambique	0	0	3	0	3	0	0	388	0	388
Niger	0	1	3	0	4	0	63	381	0	444
Nigeria	0	1	16	1	18	0	750	20.653	0	21.403
Pakistan	0	1	5	0	6	0	5.279	10.979	0	16.258
Palestine	0	0	3	0	3	0	0	1.189	0	1.189
Senegal	0	1	2	0	3	0	1.855	581	0	2.436
Sierra Leone	0	0	4	0	4	0	0	205	0	205
Somalia	0	0	7	0	7	0	0	13	0	13
Sudan	0	1	4	0	5	0	474	2.518	0	2.992
Suriname	0	0	1	0	1	0	0	60	0	60
Syria	0	0	2	0	2	0	0	956	0	956
Tajikistan	0	0	5	0	5	0	0	206	0	206
Togo	0	0	1	0	1	0	0	72	0	72
Tunisia	0	1	2	0	3	0	2.973	1.549	0	4.522
Turkey	0	1	3	0	4	0	12.115	17.769	0	29.884
Turkmenistan	0	0	1	0	1	0	0	223	0	223
Uganda	0	1	4	0	5	0	298	1.934	0	2.231
Uzbekistan	0	0	7	0	7	0	0	2.849	0	2.849
Yemen	1	1	2	1	5	35	214	604	0	853
OIC Countries	6	32	178	5	221	4.860	62.312	131.183	0	198.355
Non-OIC Countries	3	165	418	0	586	746	243.968	322.837	0	567.551
Non-OIC excl. BRIC	3	52	287	0	342	746	114.350	169.745	0	284.841
World	9	197	596	5	807	5.606	306.280	454.020	0	765.906

Source: World Bank and PPIAF, PPI Project database

A.3: Private Participation In Transport Infrastructure

Country	Total Number of Transport Projects by Deal Types					Total Investment In Transport Projects By Deal Type (\$ Million)				
	Concession	Divestiture	Greenfield Projects	Management & Lease Contract	Total Number of Projects	Concession	Divestiture	Greenfield Projects	Management & Lease Contract	Total Investment In Projects
Afghanistan	0	0	0	0	0	0	0	0	0	0
Albania	1	0	0	0	1	308	0	0	0	308
Algeria	3	0	0	2	5	125	0	0	161	286
Azerbaijan	0	0	0	0	0	0	0	0	0	0
Bangladesh	0	0	5	5	0	0	0	0	0	0
Benin	0	0	0	0	0	0	0	0	0	0
Burkina Faso	1	0	0	0	1	63	0	0	0	63
Cameroon	2	0	0	1	3	121	0	0	0	121
Chad	0	0	0	0	0	0	0	0	0	0
Comoros	1	0	0	0	1	1	0	0	0	1
Cote d'Ivoire	2	0	2	1	5	91	290	0	36	418
Djibouti	1	0	2	1	4	50	0	526	0	576
Egypt	2	0	7	2	11	156	0	2.159	0	2.315
Gabon	3	0	0	1	4	228	0	0	0	228
Gambia	0	0	0	0	0	0	0	0	0	0
Guinea	1	0	0	0	1	159	0	0	0	159
Guinea-Bissau	0	0	0	0	0	0	0	0	0	0
Guyana	0	0	0	0	0	0	0	0	0	0
Indonesia	19	1	10	0	30	2.151	372	1.519	0	4.041
Iran	0	0	0	0	0	0	0	0	0	0
Iraq	1	0	0	0	1	500	0	0	0	500
Jordan	3	0	0	1	4	1.562	0	0	0	1.562
Kazakhstan	1	0	1	1	3	231	0	31	0	262
Kyrgyz Republic	0	0	0	0	0	0	0	0	0	0
Lebanon	0	0	1	1	2	0	0	150	3	153
Libya	0	0	0	0	0	0	0	0	0	0
Malaysia	18	1	27	1	47	3.626	383	12.796	0	16.805
Maldives	1	0	0	0	1	478	0	0	0	478
Mali	1	0	0	0	1	55	0	0	0	55
Mauritania	0	0	0	0	0	0	0	0	0	0
Morocco	0	0	2	0	2	0	0	400	0	400
Mozambique	7	0	0	2	9	776	0	0	0	776
Niger	0	0	0	0	0	0	0	0	0	0
Nigeria	23	0	1	0	24	2.801	0	200	0	3.001
Pakistan	3	0	5	0	8	843	0	512	0	1.355
Palestine	0	0	0	0	0	0	0	0	0	0
Senegal	3	0	0	0	3	453	0	0	0	453
Sierra Leone	1	0	0	0	1	130	0	0	0	130
Somalia	0	0	0	0	0	0	0	0	0	0
Sudan	1	0	0	0	1	30	0	0	0	30
Suriname	0	0	0	0	0	0	0	0	0	0
Syria	1	0	0	1	2	37	0	0	45	82
Tajikistan	0	0	0	0	0	0	0	0	0	0
Togo	0	0	0	1	1	0	0	0	0	0
Tunisia	1	0	0	0	1	840	0	0	0	840
Turkey	10	0	5	2	17	3.073	0	872	4.246	8.191
Turkmenistan	0	0	0	0	0	0	0	0	0	0
Uganda	1	0	0	0	1	404	0	0	0	404
Uzbekistan	0	1	0	0	1	0	25	0	0	25
Yemen	1	0	1	0	2	220	0	190	0	410
OIC Countries	113	3	69	23	198	19.512	1.070	19.355	4.491	44.428
Non-OIC Countries	663	68	371	31	1.133	143.742	12.214	92.183	571	248.710
Non-OIC excl. BRIC	296	15	147	19	477	57.872	1.132	33.112	41	92.157
World	776	71	440	54	1.331	163.254	13.284	111.538	5.062	293.138

Source: World Bank and PPIAF, PPI Project database

A.4: Private Participation In Water And Sewage Infrastructure

Country	Total Number of Water and Sewage Projects by Deal Types					Total Investment In Water and Sewage Projects By Deal Type (\$ Million)				
	Concession	Divestiture	Greenfield Projects	Management & Lease Contract	Total Number of Projects	Concession	Divestiture	Greenfield Projects	Management & Lease Contract	Total Investment In Projects
Afghanistan	0	0	0	0	0	0	0	0	0	0
Albania	1	0	0	2	3	8	0	0	0	8
Algeria	0	0	9	4	13	0	0	2.082	0	2.082
Azerbaijan	0	0	0	1	1	0	0	0	0	0
Bangladesh	0	0	0	0	0	0	0	0	0	0
Benin	0	0	0	0	0	0	0	0	0	0
Burkina Faso	0	0	0	0	0	0	0	0	0	0
Cameroon	0	0	0	1	1	0	0	0	0	0
Chad	0	1	3	1	5	0	303	301	0	604
Comoros	2	0	0	0	2	1	0	0	0	1
Cote d'Ivoire	0	0	0	1	1	0	0	0	0	0
Djibouti	0	0	0	0	0	0	0	0	0	0
Egypt	0	0	1	1	2	0	0	475	0	475
Gabon	0	0	0	0	0	0	0	0	0	0
Gambia	0	0	0	0	0	0	0	0	0	0
Guinea	0	0	0	0	0	0	0	0	0	0
Guinea-Bissau	0	0	0	0	0	0	0	0	0	0
Guyana	0	0	0	0	0	0	0	0	0	0
Indonesia	7	0	3	0	10	897	0	123	0	1.021
Iran	0	0	0	0	0	0	0	0	0	0
Iraq	0	0	0	0	0	0	0	0	0	0
Jordan	0	0	2	2	4	0	0	1.121	0	1.121
Kazakhstan	0	0	0	0	0	0	0	0	0	0
Kyrgyz Republic	0	0	0	1	1	0	0	0	0	0
Lebanon	0	0	0	1	1	0	0	0	0	0
Libya	0	0	0	0	0	0	0	0	0	0
Malaysia	11	1	2	2	16	9.422	16	706	0	10.144
Maldives	0	0	0	0	0	0	0	0	0	0
Mali	0	0	0	0	0	0	0	0	0	0
Mauritania	0	0	0	0	0	0	0	0	0	0
Morocco	0	0	0	0	0	0	0	0	0	0
Mozambique	0	0	0	2	2	0	0	0	26	26
Niger	0	0	0	1	1	0	0	0	3	3
Nigeria	0	0	0	0	0	0	0	0	0	0
Pakistan	0	0	0	0	0	0	0	0	0	0
Palestine	0	0	0	0	0	0	0	0	0	0
Senegal	0	0	0	2	2	0	0	0	20	20
Sierra Leone	0	0	0	0	0	0	0	0	0	0
Somalia	0	0	0	0	0	0	0	0	0	0
Sudan	0	0	1	0	1	0	0	121	0	121
Suriname	0	0	0	0	0	0	0	0	0	0
Syria	0	0	0	0	0	0	0	0	0	0
Tajikistan	0	0	0	0	0	0	0	0	0	0
Togo	0	0	0	0	0	0	0	0	0	0
Tunisia	0	0	1	0	1	0	0	95	0	95
Turkey	0	0	1	1	2	0	0	942	0	942
Turkmenistan	0	0	0	0	0	0	0	0	0	0
Uganda	0	0	0	0	0	0	0	0	0	0
Uzbekistan	0	0	0	1	1	0	0	0	0	0
Yemen	0	0	0	1	1	0	0	0	0	0
OIC Countries	21	2	23	25	71	10.328	319	5.966	49	16.663
Non-OIC Countries	289	27	321	35	672	28.623	9.078	8.635	1.127	47.463
Non-OIC excl. BRIC	113	10	72	3	198	21.839	5.408	3.426	25	30.698
World	310	29	344	60	743	38.951	9.397	14.601	1.176	64.126

Source: World Bank and PPIAF, PPI Project database



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