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Abstract: The preparatory briefing on Morocco is the result of the collection of relevant cluster information in the country, including business and sector trends, cluster policies and programmes, as well as cluster mapping. This document is intended to provide an overview of the country's opportunities for European cluster organisations and SMEs.

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Objective of the report 1.

The aim of this preparatory briefing is to provide up to date information on the cluster related landscape of Morocco in order to support European cluster organisations and their (SME) members to explore the country's potential for cluster related collaboration and market opportunities. More specifically, this briefing paper provides an overview of the country's economy and sectoral trends and strengths where clusters contribute. In addition, it aims at giving an idea of the existing cluster community, the cluster policies, local support to clusters and the cluster programmes - including their historical development in short and internationalisation activity where applicable.

A complementary report ("discussion paper") will follow the publication of this report. That paper will provide an overview on the existing EU-Morocco cooperation with relation to clusters, including recommendations for an EU-Morocco cluster policy dialogue (non-public information).

The information of this report is provided through desk research and pre-existing information elaborated with local representatives.

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2. Moroccan economy: focus on sectoral trends

This section aims at providing an overview of the Moroccan economy, in the context of building cooperation with Moroccan clusters. Therefore, this overview will present briefly the features of Morocco's economy. Then, the state of EU-Morocco cooperation in terms of economic and scientific cooperation will be brought forward. Finally, three promising industrial sectors for cluster collaboration will be presented.

2.1. –Overview on economic framework

Morocco, located in the Northern Africa region also called "Maghreb", has 35.2 million inhabitants in 2016 and a surface area of 712.550km². Hence, it ranks 11th in terms of population¹ and 25^{th²} in terms of surface area among the African countries.

GDP and wealth

With a total GDP of just above USD 109 billion in 2017,³ and with a GNI per capita of roughly USD 3.000 p. a. (current rate), **Morocco is a middle-income economy**⁴. It is the sixth richest African country⁵ and ranks 11th in terms of GDP per capita⁶, in Africa.

Morocco's average yearly growth between 2007 and 2016 was 3.87%, hence ranking 40th on 54 african countries.⁷ On a more recent trend, following a good economic performance in 2015 (4.5% growth rate), the Moroccan economy has been decelerating in 2016 (1.1% growth rate). This deceleration is the result of a drought which led to a low performance of the agricultural sector.⁸ In 2017, the weather conditions enabled the agricultural sector to thrive again, bringing Morocco's growth to its average rate (3.8%).⁹

The steady growth of Morocco over the past ten years has enabled the country to **decrease significantly its poverty rate**. According to the World Bank, Morocco went from 8.7% in 2007 to 4.8% in 2014.¹⁰ Yet, this improvement still hinders wide population inequalities: whilst the country as a whole has enriched, **inequalities have increased**, widening an already deep urban-rural gap.¹¹ The World Bank expects Morocco to accelerate its economic growth to 4 % over the medium-term,

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¹ Planificateur, https://planificateur.a-contresens.net/afrique/classement_par_pays/population-AF.html

² Planificateur, https://planificateur.a-contresens.net/afrique/classement_par_pays/superficie-AF.html

³ World Bank Data, Morocco, <u>https://data.worldbank.org/country/morocco</u>, consulted on 02/01/2019

⁴ World Bank http://databank.worldbank.org/data/reports.aspx?source=2&country=MAR

⁵ Planificateur, https://planificateur.a-contresens.net/afrique/classement_par_pays/PIB-AF.html

⁶ Planificateur, https://planificateur.a-contresens.net/afrique/classement_par_pays/pib_par_habitant-AF.html

⁷ World Bank Data, https://data.worldbank.org/country/morocco

⁸ World Bank http://www.worldbank.org/en/country/morocco/overview

⁹ World Bank Data, https://data.worldbank.org/country/morocco

¹⁰ World Bank http://www.worldbank.org/en/country/morocco/overview

¹¹ High Commissionary of Planification of Morocco, https://www.hcp.ma/downloads/Niveau-de-vie-et-pauvrete_t11884.html



maintaining macro-economic stability and inflation is kept at around 2 %.¹² On their side, public officials are aware that growth alone is not enough to reduce the inequalities and that efforts must be made to ensure that growth becomes more inclusive.¹³

Economic sectors

The modernisation of Morocco's economy over the past decades has changed the sectoral share of GDP: the farming sector has decreased in favour of the service sector, whilst the active industrialisation policies have paid off and the industry now accounts for 29.2% of the GDP.

	2012	2013	2014	2015
Agriculture, value added (% of GDP)	13.4	14.7	13.0	14.5
Services, etc., value added (% of GDP)	58.0	56.6	57.6	56.3
Industry, value added (% of GDP)	28.6	28.7	29.4	29.2

Figure 1: GDP by Sector ¹⁴

The recent GDP analysis brings forward the importance of the **agricultural sector**: The sector accounts for 14.5 % of the GDP but employs 37% of the Moroccan active population¹⁵. The farming sector is divided between small scale farming and large exploitations.

Small-scale farming accounts for one third of the utilised agricultural area and is intended to selfconsumption and local markets. It employs most of the farming population. The most common crops grown in small-scale farming are cereals, olives and livestock.

The other two third of the utilised agricultural areas are used by **large-scale farming**. As a result of this dual feature, the farming policy of Morocco (Green Morocco – "Maroc Vert") addresses separately the two sectors. On the one hand, it aims at improving the production, hence living conditions and food security of small-scale farmers. On the other hand, it aims at making large exploitation thrive, in order to boost the country exports of high value-added farming and agrofood products, namely vegetables, fresh tomatoes, fruits, citrus as well as canned fruits and vegetables.¹⁶ The thriving development of Moroccan agriculture is supported by clusters.

The industry, made up of **mining**, **construction and manufacturing**, is accounting for a nearly 30 % of Morocco's GDP, in 2015.

The main export industrial sector is the **car industry**, with 83 845 jobs and an average growth of 18% per year of the turnover between 2014 and 2017¹⁷. The settlement of the Renault production plant in Tanger in 2012 has boosted the country's production and has enabled the country to become the first African car producer (overtaking South Africa). Manufactured cars are henceforth

¹⁴ World Bank http://databank.worldbank.org/data/reports.aspx?source=2&country=MAR

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¹² World Bank http://www.worldbank.org/en/country/morocco/overview

¹³ High Commissionary of Planification of Morocco, https://www.hcp.ma/downloads/Niveau-de-vie-et-pauvrete_t11884.html

¹⁵ World Bank Data, Employment in Agriculture, <u>https://donnees.banquemondiale.org/indicateur/sl.agr.empl.zs</u>, consulted on 02/01/2019

¹⁶ Ministry of Agriculture and Fishery of Morocco, http://www.agriculture.gov.ma/sites/default/files/agriculture_en_chiffres_2014-vf.pdf

¹⁷ Ministry of Industry, Investment, Trade and digital economy, automotive industry, <u>http://www.mcinet.gov.ma/fr/content/automobile</u>, consulted on 02/01/2019



Morocco's primary export (\notin 6.07 billion in 2017). The second most important industrial sector is the **aeronautic sector** accounting for \$ 1.2 billion of turnover in 2017, with an annual growth rate of 18% per year, since 2008.¹⁸ The **textile** industry ranks third but is in decline: its share in the total country's GDP went from 4.5 % in 2000 to 2.7 % in 2013. Thanks to a thriving export agriculture, the **agro-food industry** is the fourth most important industrial sector accounting for 12% of industrial exports.¹⁹ Finally, the **ICT and electronics** sector is a strategic sector, on the rise, as electronic components are used in most of the above sectors. Future economic development of the country is very likely to depend on this sector. Clusters can be found in each of these sectors.

The major Moroccan industry sectors also comprise the **energy sector**. Morocco's energy sector is characterised by a high-dependency on fossil fuels (oil, coal and gas), importantly for most of it, which account for 86.7% of the electricity production in Morocco. Renewable energies (hydroelectric and wind power) cover the remaining 13.6%.²⁰ To reduce its dependency on the import of fossil fuels, Morocco develops its renewable energy and invests in and supports through public policies the development of **wind and solar power plants**.²¹ The rise of the renewable energy sector is mostly conducted by the <u>Noor project</u>, which consists of settling solar plants in the desert. The solar energy sector is boosted by an important cluster.

The **services sector** accounts for just over half of Morocco's GDP (56 %). **Travel & tourism** contribute to the GDP substantially. According to data compilations of the World Travel and Tourism Council, its contribution to the GDP reached almost 18 % of GDP in 2014. The employment effect, including travel and tourism induced effects, was calculated at more than 1.7 million jobs²². **Banking and finance** are also important, and Casablanca is the second financial place in Africa.

The economy is heavily stimulated by the cash flow sent by Moroccan expats. Moroccan living in OECD country accounted for 2.6 million in 2010 and are the 10th biggest emigrant community. Each year, they transfer US\$ 6.4 billion back to Morocco, accounting for 6.5% of the GDP.²³

Trade and exports

The EU is Morocco's largest trading partner, accounting for more than half of its trade in 2017 - 64.6% of Morocco's exports went to the EU. Morocco is the EU's 22^{nd} largest trading partner, representing 1.0% of the EU's total trade with the world:²⁴

https://www.finances.gov.ma/depf/SitePages/publications/en_chiffres/bord_annuel/tableau_bord_sectoriel.pdf

²⁰ International Energy Agency, Electricity and heat for 2014, <u>http://www.iea.org/statistics/statisticssearch/report/?year=2014&country=MOROCCO&product=ElectricityandHeat</u>

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¹⁸ Ministry of Industry, Investment, Trade and digital economy, aeronautic industry, <u>http://www.mcinet.gov.ma/fr/content/aeronautique</u>, consulted on 02/01/2019

¹⁹ Ministry of Economy and Finance of Morocco,

²¹ Invest in Morocco, Opportunités d'Investissement, Energies Renouvelables, <u>http://www.invest.gov.ma/?Id=24&lang=fr&RefCat=2&Ref=145</u>

²² World Travel & Tourism Council (WTTC), Travel & Tourism Economic impact 2015 Morocco; https://www.wttc.org/-/media/files/reports/economic%20impact%20research/countries%202015/morocco2015.pdf

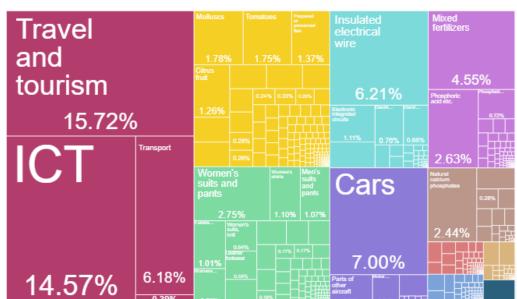
²³ HuffPost Maroc, OCDE: Les MRE sont une force importante pour l'économie marocaine, 21/02/2017, <u>https://www.huffpostmaghreb.com/2017/02/21/ocde-mre-economie n 14908438.html</u>, consulted on 02/01/2019

²⁴European Commission http://ec.europa.eu/trade/policy/countries-and-regions/countries/morocco/



- The EU's goods imports from Morocco are dominated by machinery and transport equipment (40.4 %), textiles and clothing (19.3 %) and agricultural products (23.0%). The EU's exports to Morocco are dominated by machinery and transport equipment (37.7%), followed by fuels, metals and minerals (23.4 %) and textiles and clothing (8.1 %);
- Two-way trade in services amounted to € 8.8 billion in 2016 with EU imports of services representing € 5.2 billion and exports € 3.6 billion.

Exports by sector in 2016 were:



\$41.7B

Figure 2: Morocco's exports in 2016 in The Atlas of economic complexity²⁵

The following sectors lead the export statistics (goods):

- Services (36.9%);
- Farming and agrofood products (14.1%);
- Textiles (12.5%).

Major categories of imports in 2016 were as shown in the following figure:

²⁵ "The Atlas of Economic Complexity", Centre for International Development at Harvard University, http://www.atlas.cid.harvard.edu

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			\$	49.4B			
ICT	Wheat and meslin	Sugare Com	Petrole			Insulated electrical with 1.2	
	2.35%		refined	1		Talapho	1976 U.8876 Ineromi Parts
	0.30% 0.28% 0						
	0.61%		6.	50%		U.60%	0.59% 0.58%
			Petroleum gases	Coal Bulphu.		0.47%	
7.57%			ŭ.	4 400/ 0.020	0.25%		
Transport			2.17%	1.10% 0.83 0.29%	0.23%	Bruchavak Bade	amilini Copper wire
	Cars	Parts of motor vehicles	0.74%	0.53% 0.45% 0.42	Knitted fabrics % 0.82% 0.50%	end their parts, of ran or 0.77%	0.68% 0.64%
				19% 0.19% 0.18%	0.26%	0.21%	 ─────
6.56%	3.69%	2.04%					
	Other Molor aircraft and	Parts of other sircnell				0.24%	
Travel and	spacecraft 0.60 1.55%	ni 0.66%				0.20%	Commodila
tourism	Vehicle			╶╧╴╴╴╴╴		0.25%	
2.95%	Bodies 0.38	% ┝─╞─┼┼				0.25%	1.05%

C 40 40

Figure 3: Morocco's imports in 2016 in The Atlas of economic complexity²⁶

In combination with the export statistics, the import statistics helps to get a first understanding of the position of value added networks in the sectors:

- Machinery and transport equipment may be supplied by related imports (iron & steel, other prefabricated components, machinery, etc.);
- Textile/clothing manufacturing seems to be supplied with imports of fabrics, yarn etc. (which is included in "manuf. goods classified chiefly by material");
- The well performing Moroccan agriculture is not enough to guarantee self-sufficiency and Morocco still needs to import cereals, oil, sugar, milk and associated products.²⁷.

Any other sectors are minor, 1 % or less.

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²⁶ "The Atlas of Economic Complexity", Centre for International Development at Harvard University, http://www.atlas.cid.harvard.edu

²⁷ Ministry of Agriculture and Fishery of Morocco, http://www.agriculture.gov.ma/sites/default/files/agriculture_en_chiffres_2014-vf.pdf



Opportunities for Europe 2.2.

In terms of cooperation, the EU and Morocco have a longstanding history and well-established trade and scientific cooperation agreements. Exports, notably to European countries, are an important feature of Morocco's industrial policy.

Trade agreements

The first trade agreement was signed in 1969, on the impulse of France who wanted to maintain strong ties with its former colony. The trade agreement mainly consisted of facilitating the import of Moroccan goods to Europe, under the condition that they did not compete with the European production. This guiding principle has been maintained since then and trade and partnership agreements have been set up and modified, based on the needs of the European economy.

Trade with Morocco has been boosted under the Barcelona process initiated in 1995, which aimed at deepening the cooperation between the EU and ten of the Mediterranean countries. This process aimed at allowing free trade, but also supporting financially the development of these very countries to enable their economy and political system to converge towards the European model.

At the end of the Barcelona process, the EU and Morocco have signed an Association Agreement, which entered into force in March 2000.

Morocco is the largest recipient of EU-funds in the framework of the European Neighbourhood Policy out of sixteen countries, and the EU and Morocco established a "Free Trade Area" liberalising two-way trade in goods. It provides for:

- Tariff-free two-way trade of industrial products, together with a selective liberalisation of trade in agricultural, agro-food and fisheries products;
- Rules and disciplines on non-tariff-based trade measures; _
- A general right to establish businesses and provide services in the other territory;
- Current payments and capital movements; _
- Common rules on competition and intellectual property.²⁸

Negotiations for a "Deep and Comprehensive Free Trade Area (DCFTA)", aiming to realise a single market between the EU and Morocco, were launched in 2013. The DCFTA builds on issues not presently covered such as trade in services and investment. It is intended to provide new trade and investment opportunities and support bringing Morocco closer to the EU single market. It shall also support economic reforms in Morocco and bring its legislation closer to that of the EU in traderelated areas.²⁹

Scientific and technology cooperation

In the context of the Barcelona Process, an Agreement for Scientific and Technology Cooperation has been in place for almost 15 years between the European Union and the Kingdom of Morocco to encourage and facilitate innovation cooperation.

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²⁸ European Commission http://ec.europa.eu/trade/policy/countries-and-regions/countries/morocco/

²⁹European Commission http://ec.europa.eu/trade/policy/countries-and-regions/countries/morocco/



Statistics about EU-Morocco Cooperation in FP7 show that the trend of participation of Morocco in the Programme has been increasing: Morocco was the second most active Mediterranean country in FP7 and 57 Moroccan public and private institutions participated in 74 projects under FP7. The total EU contribution to these projects has amounted to almost € 296 million, of which € 10 million went to the Moroccan partners.³⁰ Many of those projects were directed at innovation support, and covered policy and actor level activities directed at preparing intensified cooperation at actor level.

A further analysis of selected projects, including an assessment of their possible or already achieved impacts is part of the mentioned discussion paper on Morocco.

Moroccan industrial development initiatives

In addition to the bilateral agreements, Morocco is investing heavily in the development of its industry, through important public policies and funds. A wide array of policies is intended to help the industry to enter the European markets.

Historically, Morocco has had different phases on industrial policy. The first industrial policies, designed between 1960's and the 1980's were intended to manufacture locally basic products, and decrease the dependency of the country to imports. This policy has allowed the country to build a solid basis for its industrial sector. Nevertheless, the protectionist policies have hindered the capacity of the industrial system to be competitive.³¹

As a result, Morocco made a radical policy shift in the 1980's and turned towards high-intensity labour force, export-oriented policies, enabling the rise of both textile and agro-food sectors. Morocco exported then low value-added products to Asia, Eastern Europe and MENA countries. These last became competitors over time, leading Morocco to change the scope of its policy to higher value-added products, targeting strategic global markets. The shift occurred in 2005 with the Emergence Plan ("Plan Emergence"), followed by the National Pact for Industry Emergence (Pacte National pour l'Emergence Industrielle"), in 2009.³²

The National Pact for Industry Emergence enabled Morocco to increase its exports by 22% and FDI by 23% in five years. ³³

Thriving on this first success, in 2014, Morocco enacted the Industrial Acceleration Plan ("Plan D'ácceleration industrielle"), assigning the following general objectives until 2020³⁴:

The creation of half a million jobs, half of which come from foreign direct investment, and the other half from a renovated national industrial base;

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³⁰ European Commission http://ec.europa.eu/research/iscp/index.cfm?pg=morocco

³¹ Karim El Mokri, La stratégie industrielle 2014- 2020 du Maroc et ses implications potentielles sur le processus de transformation structurelle, http://www.ocppc.ma/publications/la-strat%C3%A9gie-industrielle-2014-2020-du-maroc-et-ses-implications-potentiellessur-le#.WITP1qjibIU

³² Ibid

³³ Moroccan Ministry of Industry, Trade, Investment and Digital Economy http://www.mcinet.gov.ma/fr/content/pland%E2%80%99acc%C3%A9I%C3%A9ration-industrielle-2014-2020

³⁴ Moroccan Ministry of Industry, Trade, Investment and Digital Economy http://www.mcinet.gov.ma/~mcinetgov/en/content/documents-online-services



- A nine points growth in industry's share of GDP, increasing from "14%³⁵ in 2014 to 23% in 2020".³⁶

The strategy is based on three pillars. First, Morocco aims to strengthen its existing sectors to create well-integrated value-chains in twelve strategic field: cars, aeronautic, textile, leather, electronic components, electricity, chemistry, pharmacy, construction materials, renewable energies, metallurgy and offshoring. For all twelve sectors, the state has the ambition to create more jobs by increasing production and to formalise the informal actors of the sector through easy administrative procedures and tax incentives for very small businesses. Cluster support revolves around these sectors.

The second pillar of the strategy is to strengthen the industrial fabric through three embedded measures: public funding for the modernisation of the industry, private offer to ease and encourage private investment and creation of industrial areas, benefitting from state of the art infrastructures and tax incentives.

The third pillar is dedicated to internationalisation of the Moroccan industry: the Ministry makes special efforts to support export sectors, by negotiating free trade agreements, but also by making bilateral agreements for some specific products. The internationalisation also involves increasing more FDI.

³⁵ It is well noted that the industrial share of GDP between the World Bank and the Government of Morocco varies considerably. Some structural differences can explain such a gap. Unfortunately, we could not access the disaggreated data

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³⁶ Ministry of Industry, Investment, Trade and Digital Economy of Morocco, <u>http://www.mcinet.gov.ma/fr/content/plan-</u> <u>d%E2%80%99acc%C3%A9I%C3%A9ration-industrielle-2014-2020-0</u>



2.3. Sectoral strengths

This section presents three sectors that are traditional or emerging in Morocco and present an interest and potential for EU-Morocco cooperation in terms of R&D and innovation, market access, and investments: agro-food industry, textile, as well as ICT and electronics.

The automotive industry and aeronautics, which are the two most important industrial sectors of the country are not mentioned here: they are mostly constituted of production plants of European companies henceforth have limited innovation capacities. They are not structured as clusters but may be part of one later on.

Agro-food industry

Based on a thriving farming system, the agro-food industry is amongst the most important industries of Morocco. In 2013, the agro-food production accounted for \leq 12.7 billion, of which 14.3% was exported.

Food production in Morocco is characterised by a dual system. On the one hand, a third of the utilised agricultural surface is used by small-scale farmers growing cereals, livestock and olive trees, with the production being mostly turned towards self-consumption and local markets. The twoother thirds have been valorised by the government thanks to irrigated perimeters enabling the production of fruits and vegetables and notably tomatoes and citrus fruits, for the international market.

In line with the production system, the transformation industry is divided between the products intended for the national market and those, with higher value-added intended for the external market.

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	20	14	2013		Variation 2014 VS 2013	
FAMILLE DE PRODUIT	Quantité (1000 tonnes)	Valeur (Millions DH)	Quantité (1000 tonnes)	Valeur (Millions DH)	Quantité	Valeur
CÉRÉALES - LÉGUMINEUSES - Graines Diverses - Graines		46,8	2,5	51,0	196	-8%
CONS. CORNICHONS/CAPRES		492,3	16,4	425,9	7%	16%
CONS. DE FRUITS	11,1	183,3	10,5	168,4	6%	9%
CONS. DE LÉGUMES	4,2	148,3	3,8	141,1	9%	5%
CONS. D'OLIVES	75,7	1388,0	62,4	1147,7	21%	21%
CONS. JUS DE FRUITS/LÉGUMES	11,8	86,6	8,7	61,0	35%	42%
ÉPICES - HERBORISTERIE	58,1	1097,9	61,0	1069,2	-5%	3%
FRUITS & LÉGUMES DESHY/SÈCHES		169,2	2,9	122,2	70%	38%
FRUITS & LÉGUMES SURG/CONG.		803,7	69,5	779,6	3%	3%
HUILES VÉG. / VINS/VINAIGRES / A.P.O.V.	52,6	1077,3	33,8	807,8	56%	33%
TOTAL GÉNÉRAL	310,2	5493,3	271,5	4773,9	14%	15%

Figure 4 Transformation products in volume and value $^{\rm \scriptscriptstyle 37}$

The table above shows that the three most valuable value chains of agro-food in Morocco are olives, spices and olive oil. In terms of volume, frozen vegetable is the main national transformation product.

In 2016, the export turnover was Us\$ 5.92 billion, and the exports' share is increasing over time. The main exported products are in 2016: molluscs (12.5%), tomatoes (12.3%), prepared or preserved fish (9.69%) and citrus fruits (8.9%).³⁸

Unlike all other industrial sectors, the agro-food industry policies fall in the hands of the Ministry of agriculture. The agro-food industry is intensively supported by the Green Morocco policy, a policy enacted in 2008, which aims at reinforcing the farming and transformation of high-value added products. The policy adopts a dual approach. On the one hand, it aims at modernising large-scale agriculture to foster water-intensive productions (fruits, and vegetables), and provide them with adequate transformation industry. On the other hand, it aims at structuring small-scale farming value chains, notably in the case of olives, which are then transformed into high-value added products (canned olives and olive oil). In addition, the policy supports and funds the develop of high-tech transformation facilities³⁹. Moroccan agriculture is boosted by clusters under different shapes (agropoles, clusters, and cooperatives) (cf section 3.3).

Textile

As shown in the sectoral overview of Morocco, textile is a major industrial sector, which has dropped in the past few years: Moroccan textiles were mostly exported towards Europe. When the European Union dropped its barrier to Chinese textiles, the Chinese competition led to a decline of

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 ³⁷ Ministry of Agriculture and Fishery of Morocco, http://www.agriculture.gov.ma/sites/default/files/agriculture_en_chiffres_2014-vf.pdf
³⁸ Harvard university, the Atlas of Economic Complexity,

http://atlas.cid.harvard.edu/explore/?country=134&partner=undefined&product=undefined&productClass=HS&startYear=undefined& target=Product&year=2016, consulted on 02/01/2018

³⁹ Ministry of Agriculture and Fishery of Morocco, <u>http://www.agriculture.gov.ma/pages/la-strategie</u>



Moroccan textile exports. Despite such decline, the textile sector is amongst Morocco's most important industrial sectors.

According to the Moroccan Ministry of industry, investment, trade and digital economy ("Ministère de l'industrie, de l'investissement, du commerce et de l'économie numérique" - MCINET), the textile sector, in 2017 accounts for 7% of the industrial added value, 5% of the industrial production and 27% of industrial employment. ⁴⁰

The industry evolves around six major value-chains: denim, fast-fashion, industrial distribution of industrial brands, knitting, house-textiles and technical textiles.

The textile sector is a well-structured and organised sector, in which 90% of the sector's professionals are organised within the Moroccan association of textile and clothing industries ("Association marocaine des industries du textile et de l'habillement" - AMITH), the country main business association. ⁴¹

To counter the effects of the Chinese competition for the European market, the MCINET and the AMITH worked together to ensure the competitiveness of Moroccan textiles and clothing. The strengths of the sector lie in its organisation, its great production capacity, its qualified labour force, altogether enabling rapid production and delivery of quality products.⁴²

Public policies address the various needs of the sector acting on five mechanisms:

- Supporting the sector's strategic value chains, by providing funds for innovation and exports, creating adapted training courses and renting at a lower price land for factories;
- Promoting investment by co-investing in real-estate for new factories;
- Offering fiscal incentives on the importation of equipment;
- Accompanying SME through specific support programmes;
- Creating free zones to encourage the gathering of textile companies in strategic places.⁴³

AMITH, as a business association, is not a cluster as such, but endorses cluster like responsibilities. It has enabled the creation of a denim cluster.

ICT and electronics

The ICT and electronics sector is thriving in Morocco as it is necessary in other important industrial domains, such as the automotive and the aeronautic industries, the two most important industrial branches of Morocco, as well as defence and security. The sector is on the rise thanks to the development of high value-added products, the rise of better organised subcontractors, the increase of the share of ICT electronics in the industrial sectors mentioned above.

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⁴⁰ Ministry of Industry, Investment, Trade and Digital economy of Morocco, <u>http://www.mcinet.gov.ma/fr/content/textile</u>

⁴¹ Moroccan Association of Textile and Clothing Industry, <u>http://www.amith.ma/portail/PageFR.aspx?id=64</u>

⁴² Moroccan Association of Textile and Clothing Industry, <u>http://www.amith.ma/portail/PageFR.aspx?id=64</u>

⁴³ Ministry of Industry, Investment, Trade and Digital economy of Morocco, <u>http://www.mcinet.gov.ma/fr/content/textile</u>



In addition, there is still potential for growth in ICT as Morocco has the capacity to produce more and more complex electronic pieces, hence, get to produce the offshorable parts of European electronics.

ICT and electronic is considered a strategic sector for the public authorities, who dedicate six policies to support the sector comprehensively:

- Supporting the sector's strategic value chains, by providing funds for innovation and exports, creating adapted training courses and building adapted industrial parks for rental;
- Co-investing in real-estate, equipment and training;
- Offering fiscal incentives on the importation of equipment;
- Accompanying SME through specific support programmes;
- Creating free zones to encourage ICT and electronic companies to settle in the same place.

There are several clusters related to this sector in Morocco.

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Cluster community in Morocco 3.

This section presents the characteristics of clusters in Morocco before proceeding to a mapping of the Moroccan clusters. Then, the clusters in each of the strategic sectors described in the previous section will be analysed in detail.

Characteristics of clusters in Morocco 3.1.

Cluster-like organisations are well-rooted in the Moroccan economy, as many handicraft and smallscale farming businesses have gathered in the form of cooperatives, as of 1937, to gather the production and proceed in common to the transformation of products. The shape, purpose and level of state-support have varied over time. Even though they cannot be seen as "innovation clusters", cooperatives are a traditional form of clusters that is still active and relevant and constitute high value-added chains.

In addition to these traditional clusters, the State of Morocco has enabled the emergence of clusters in industrial value chains. Moroccan clusters have emerged lately based on a double impulse. On the one hand, the industrial policy impulse to gather companies of the same sector on the same territory, either through the development of technological parks or designated free zones, has enabled Moroccan industries of a same sector to aggregate. This impulse has been complemented by a policy led by the Ministry of Finance entitled "Morocco Innovation", in 2009. This strategy, aimed at triggering innovation and competitiveness, aimed specifically at creating clusters, and provided public funding for it.⁴⁴

As a result, clusters in Morocco come under three different shapes:

- Farming / handicraft cooperatives;
- Cluster initiatives, built on a model comparable to some European clusters, i.e. an association of businesses, public sector and academics who team up to collaborate and innovate;
- Agropoles and Technoparks, which gather on the same territory industries of the same sectors, as well as research institutes, to foster innovation and increase the territory's specialisation for better competitiveness and attractiveness.

Cvcle des Hautes Etudes pour Développement Economique, Stratégie Innovation, le Maroc https://www.finances.gov.ma/Docs/2012/daag/5048 strategiemarocinnovation.pdf

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Mapping of clusters 3.2.

In 2013, in the frame of the EU-Morocco Cooperation Project "MOBILISE"⁴⁵, a number of cluster organisations (operating a cluster initiative) and organisations with a similar function but different names (technology parks, agropoles) were identified.

In total, twelve organisations responded and showed an interest in collaborating with EU partners. Among them were six cluster organisations, selected and supported by the Moroccan government in the framework of its support programme.⁴⁶ The table below provides an overview of cluster initiatives, managed by cluster organisations, agropoles and technoparks.

The currently running EU-funded initiative The Next Society has also contributed to the mapping by connecting to Moroccan clusters and encouraging them to profile on their platform.

In addition, several organisations were found online, either through their registration on the ECCP platform, or browsing Moroccan websites.

Cluster initiatives	City/Region
MAROC NUMERIC CLUSTER (MNC), <u>www.mnc.ma</u> : ICT & creative industries: IT and software development, telecommunication services, service provider, e-commerce	Casablanca
MOROCCO MICROELECTRONICS CLUSTER (MMC), <u>www.microelectronics.ma</u> : Embedded systems, integrated circuits design, packaging, optoelectronics	Rabat
Electronique, Mécatronique et Mécanique Cluster (CE3M), www.ce3m.com : Electronics, mechatronics and mechanics; application areas rail, aerospace, automotive, medical, energy and general electronics industries	Mohammedia
Agadir Haliopôle Cluster (AHP), www.agadir-haliopole.com : Fishing and seafood processing	Agadir
Océanopole Tan Tan, <u>http://www.oceanopoletantan.ma/</u> : Maritime industries: biological resources, naval engineering, energy, environment	Tan Tan

⁴⁵ Project-Fiche e.g. https://tethys.univ-amu.fr/sites/tethys.univ-amu.fr/files/projet/fiche_mobilise_-_fr01062015.pdf

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17 European

⁴⁶ Gouze, N., Hahn, P., El-Youssoufi, "Catalogue of Moroccan and European cluster organisations"; public report in the frame of the EC FP7 project "MOBILISE"



Cluster MENARA, <u>www.clustermenara.com</u> : Marrakech exclusivity network for advanced research in art's living, agrofood, cosmetics	Marrakech
Moroccan Denim Cluster <u>http://www.moroccandenimcluster.org/</u> Innovation in denim and sportswear, strengthening the value-chain competitiveness, promote sustainable development in the textile industry.	Casablanca
Cluster des Textiles Techniques Marocains (C2TM) <u>www.c2tm.ma/</u> Product innovation and promotion of high value-added products, creation of an internal market and increase of exports.	Casablanca
Casablanca Home Textile Cluster (CHTC) https://www.medcreative.org/cluster1-morocco The CHTC gathers 120 companies accounting for 70% of the national production. The cluster provides three services to its members: co-contracting weavers, brands services and design.	Casablanca
Cluster Solaire <u>http://www.clustersolaire.ma</u> Structure gathering the solar energy stakeholders in order to develop a competitive industrial value chain. Building the capacity of the branch stakeholders whilst developing the technology.	Casablanca
Cluster Industriel pour les Services Environnementaux (CISE) http://cisemaroc.org/ The Moroccan Industrial Cluster for Environmental services was created in 2014 and gathers companies, public and higher education institutions to conduct research activities aimed at developing less-polluting processes.	Casablanca

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Agropoles	City/Region
Agro-pôle Olivier, www.agropoleolivier.com : Olives and olive oil cluster: Technology transfer and providing accessibility of (international) achievements for contributing to the upgrade and development of the olive sector; research and development to meet the concerns of the olive oil sector; national and international observation of technical, technological, legal, commercial, and strategic aspects regarding the olive oil sector; establishment of an "Olive Information System for Development of the Olive Oil Sector" based on technical, economic and financial data, quality and characteristics of olive oil, etc.	Meknès
Agrinnov http://www.agrinnov.net/ Agrinnov is a cluster gathering the agro-food stakeholder of Morocco. Its role is help companies to network, incubate innovative start-ups, advise existing companies and help their members obtain fundings. In 2017, the organisation received a Bronze Label from the ESCA organisation.	Rabat
Agrotech SMD, <u>www.agrotech.ma</u> : Platform for exchange and cooperation between regional and national institutions regarding agriculture, agro-food business (mainly vegetables and citrus fruits), and water resources management.	Agadir
Agadir Haliopôle <u>http://agadir-haliopole.com/fr/accueil</u> Located in a fishing area, the cluster encourage R&D to improve to products and boosts exports. The cluster has received a Bronze ECSA label in 2014.	Agadir

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Technoparks	City/Region
Casa Technopark , <u>www.technopark.ma</u> : Technopark, launched in 2001 on the city of Casablanca. Rabat duplicated the model in 2012, Technopark Casa is a community of innovation constantly hosting more than 230 companies (Casablanca & Rabat) in the sectors ICT and "green tech" with more than 60 new starts-up every year. It offers various services: furnished offices, local services and support for market access and financing, export assistance but also lobbying major donors of public and private order; chairs the venture capital fund MNF <u>www.mnf.ma</u> ; hosts a variety of major players supporting entrepreneurship and innovation.	Casablanca, Rabat
CasaNearShore Park, <u>www.casanearshore.com</u> : is a service offering office spaces and other infrastructure and assistance services to companies specialising in software development, infrastructure management, back office banking, insurance services, and customer relationship management; supporting offshoring of international enterprises.	Casablanca
Parc Technopolis, www.technopolis.ma: Technology Park with an area of 300 hectares, addressing investments and projects related to new technology sectors; Technopolis Park is open to all undertakings operating in the nearshoring activities and carrying out at least 70 % of their revenues from exports, starting from the third year following the beginning of their activity or installation in Technopolis Park.	Rabat
Fès Shore, www.fes-shore.com : Fez Shore is dedicated to developing new economic potential of the region in the field of offshoring. It offers to companies the assurance to benefit from an integrated park and getting accompanied by efficient support services, a legislative incentive and established in an urban environment known worldwide by its culture, tourism and technology; 130,000 square meters of office floors and services including car parks, sports centre, shops, etc.	Fez

Figure 5: Supported CM and similar structures with interest in EC cooperation

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3.3. Clusters in strategic sectors

Four strategic sectors, presenting interesting clusters, in the context of EU-Morocco cluster cooperation were identified:

- The agro-food industry;
- Textile;
- ICT and electronics;
- Renewable energies.

Agro-food industry

The agro-food sector is the sector in which the most diverse types of clusters can be found:

- Small-scale farming cooperatives;
- Two clusters; and
- Two agropoles.

Small-scale farming **cooperatives** must be taken into account to understand the functioning of the agro-food industry in Morocco, as they supply in quantity the raw product (olives, argan) to be transformed. The shape and functioning of the cooperative are being radically changed and improved under the influence of the state and international organisations (cf. Cluster policies and programmes in Morocco

The **two industrial clusters** (i.e associations gathering various businesses) can be found in the fish industry and are Agadir Haliopole Cluster and Oceanopole Tan-Tan.

Agadir Haliopole Cluster was created in 2010 and is composed of innovative enterprises in the halieutic industry (80% of SMEs), as well as representatives of the State, business association and well as research training centres. The purpose of the cluster is to promote collaborative actions between the various value chain actors in order to create new products and increase the competitiveness and transformed sea products of Agadir. More precisely the cluster aims at:

- Diffusing and improving a culture of sustainable fishing in order to preserve high-quality fishing resources;
- Creating higher-value added halieutic products thanks to innovative transformation processes;
- Promote Moroccan labels;
- Reinforce the capacity building of the professionals;
- Develop national and international partnerships;
- Foster patent applications.

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In terms of research and innovation, the cluster advertises to partner with four moroccan universities for research and innovation. However, no information is provided on the output and outcomes of such collaboration.⁴⁷

The **Oceanopole Tan Tan** was created in 2010 and gathered 29 marine stakeholders and the University Obn Zohr Agadir in a 52ha technological park next to Tan Tan. This project aimed at creating a technological platform with state of the art installations to make research on aquaculture and the valorisation of marine resources.⁴⁸ One year after its inception, in 2001, the Oceanopole signed a convention with two French competitiveness clusters. This convention aimed at channelling the French expertise into the development of the Oceanopole.^{49 50}

The **Agropole Olivier**, dedicated to the olive oil is attached to the National Agriculture School of Meknes. It aims to reinforce the Moroccan olive oil value chain through:

- Transferring technology to olive oil producers to increase the quality of the product;
- Conducting research and development to address the challenges faced in the value-chain (at both production and transformation levels);
- Promoting Moroccan olive oil;
- Implementing an information service to develop the value chain containing financial, economic and technical data on the olive oil.

Based on information found on the university website, several agronomic projects are conducted by the university on olive oil (as well as other agronomic productions), and some of them are conducted in collaboration with European institutions and/ or university. Hence, this cluster is of high potential for collaboration.

The **Agrotech Souss Massa Draa (SMD)** was created in 2006 by the regional council of Souss Massa Draa, in partnership with private public stakeholders as well as research stakeholders. The region of Souss Massa Draa has witnessed an important increase of the production of citrus. To ensure stable production and high-quality products, citrus require a lot of water, yet the region is characterised by high-levels of drought. The current irrigation system is under pressure and the Agrotech SMD was constituted around an experimental project on smart irrigation. The project aimed at building 30 forecast stations, communicating rainfall data by SMS to citrus farmers to help them monitor closely their use of water. This close monitoring of their irrigation system aimed at conducting to reduce the use of scare water resource, whilst protecting the production from drought.

Amongst the research partners, the French National Institution for Agronomic Research (INRA) was amongst the founding partners. Yet, once more, the official website of the Agrotech does not work

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⁴⁷ Agadir Haliopole Cluster, http://agadir-haliopole.com

⁴⁸ Un océanoparc en projet à Tan Tan, http://www.leconomiste.com/article/890207-un-oceanoparc-en-projet-tan-tan

⁴⁹ Maghress, Economie de la mer: l'Océanopole de Tan Tan partenaire de deux pôles mer français, <u>https://www.maghress.com/fr/mapfr/29720</u>

⁵⁰ Unfortunately, the official website of the organisation does not work anymore and no more recent information on the development of the Oceanopole are available online.



anymore. It is therefore assumed that the Agrotech has ended once the smart irrigation system was implemented.

The **Agrinnov Cluster** was created in 2016 and is dedicated to channel innovation and technology transfer in the agrofood sector to increase the quality of its products and their value-added. The objectives of the organisation are to create an ecosystem fostering R&D projects in the agrofood sector, accompany its members in their innovation process both by supporting its members in the intellectual property process and for their pilot projects, and increase their internationalisation. The cluster has partnerships with Moroccan institutions, with both the MCINET and the regional centre for investments, in charge of promoting entrepreneurship. The cluster is supported by two international partners: Groupe Elephant Vert, a Swiss group specialised in technology transfer and Enactus, an American NGO, supporting social entrepreneurship; The cluster received in 2017 a bronze medal from the ESCA for its good management.

Among the above, three clusters **Agadir Haliopole Cluster**, **Agrinnov** and **Agropole Olivier** are potential partners for EU-Morocco cooperation and small-scale farming cooperatives present potential for future cooperation.

Textile

As seen in part 2.3 on sectoral strengths, the textile branch in Morocco, despite its recent decline, in the face of the global competition, is a very structured sector, gathered under one association: **Moroccan association of textile and clothing industries (AMITH)**. This association, well-structured and well connected to the Ministry of Industry (MCINET), is powerful.

The association, in cooperation with the MCINET launched the **Maroc Denim Cluster**. The cluster is an association gathering businesses all along the denim value chain (weaving, sewing, denim washing, accessory making), fashion and design training centres, a technical textile research institution and an export promotion agency. Its goal is to create a favourable ecosystem for denim and sportswear innovation, to reinforce the competitiveness of the value chain and promote its capacity to important decision-makers, as well as develop sustainable development in the valuechain.

Even though this cluster has been supported by the MCINET at its inception, its creation, as an offshoot of AMITH, seems to be private-led. Though innovation is defined as the main purpose of the cluster, on the website, there is no description of technical innovation projects. Nevertheless, the cluster seems like a potential partner for EU-Morocco partnerships.

The other textile cluster found in the cluster mapping is the **Cluster for Moroccan Technical Textiles** (Cluster des Textiles Techniques Marocains - C2TM). The cluster was created in 2013 and was funded by nine Moroccan businesses in partnership with the AMITH and three higher education institutions. The main goal of the cluster is to bring Morocco onto the high-value added technical textiles market, as well as conducting collaborative projects to innovate and improve products.

The cluster offers six services:

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- Develop technical textiles in the field of agro-textile, professional clothing, car, home textile, building, geotextile and health;
- Develop the sourcing of raw material by listing them and inventorying national and international raw material providers;
- Label collaborative projects and support the businesses collaborative projects by providing them with expert and mobilising funds;
- Promote the technical products on national and international markets;
- Contribute to the update of technical and human resources of the businesses;
- Encourage member-businesses to comply to the norm and regulatory framework of the sector.

On its website, the cluster provides a brief description of eight collaborative research projects. Unlike the previous cluster whose inception was triggered by MCINET, no mention of the ministry is provided on the website. This cluster also seems like a potential partner for EU-Morocco partnerships.

The Home Textile Cluster in Casablanca was also created in 2016. As per its description, it gathers 120 companies, accounting for 70% of the national production and employing 22,000 people. The cluster is supported by the European Union, the Italian Agency for Development Cooperation, the Union for the Mediterranean and the United Nations Industrial Development Organisation (UNIDO). On the Moroccan side, the cluster is supported by powerful corporations, including the AMITH as well as public institutions (Maroc PME, Maroc Export), and training institutions.

ICT and electronics

The three ICT and electronics clusters mapped in the previous sections are all the result of the 2009 "Morocco Innovation" policy.

The **Maroc Numeric Cluster** is a structure created in 2010 with mixed governance involving the State, major corporations, SMEs, higher education and research institutions and funding institutions. The cluster focuses on four ICT excellence niches: mobile services, safety, electronic money and digital rights, multimedia as well as software packages. ⁵¹

The cluster gathers 50 members and has 14 research partners. In terms of collaborative research, between 2001 and 2015, the cluster supported 16 innovation projects. In addition, the cluster reinforced the capacity of its members by organising three trainings, conducting three market surveys and obtaining a state-recognition for their master programme entitled "Master IT for journalists". Finally, the cluster managed to sign three collaborative research agreements with French clusters and a cluster collaboration project with other ICT clusters: ClusMED.⁵²⁵³

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⁵¹ Maroc Numeric Cluster, http://www.marocnumericcluster.org

⁵² Plan Strategique MNC 2020,

http://www.marocnumericcluster.org/index.php?option=com_content&view=article&id=240&Itemid=94&Iang=fr

⁵³ Digital Europe, http://www.digitaleurope.org/Our-Work/Projects/Past-projects/ClusMed



The **Morocco Microelectronic Cluster** was created in 2010 and aimed at creating research and development in the field of microelectronics. Secondary sources indicate that two collaborative research contracts have been signed with both Mentor Graphics and ST-Ericsson.⁵⁴ However, the cluster does not have a functioning website anymore.

The **CE3M cluster** – Electronics, mechanics and mechatronics cluster – was created in 2010 and gathered the Ministry of Industry, two major corporations, one technical centre, one association and five universities with associated research centres. ⁵⁵ Despite, its composition no information can be found on the cluster, which, also has no functioning website.

Renewable energies

Renewable energy is an important sector, on the rise (cf. section 4.4 below) and is bound to one main project: the Noor project, started in 2009, which consists of building and exploiting four solar power plants in the desert. This project is of upmost importance as it would radically change the energy mix of the country by bringing the share of renewable energy to 42% in 2020 (13.6% in 2014, mostly composed of hydroelectric and wind power).⁵⁶ In the context of this project, the King of Morocco has created a Moroccan agency for renewable energies (Masen) whose role is to pilot the development of renewable energies in Morocco.

The **Solar Cluster** ("Cluster Solaire") was founded in 2014. The objective of the cluster is to associate the stakeholders of the solar value chain to develop a competitive value chain, in the straight line of the 2009 Noor plan. The cluster aims at reinforcing the capacities of the value chain, by conducting collaborative research projects, whilst triggering innovation and entrepreneurship to foster the creation of businesses.⁵⁷

The cluster was created by Masen. Its board of directors is composed of Masen as well as two national federations (electricity and metallurgy), and member businesses, as well as two universities. The Masen president is the director of the cluster. Interestingly, international organisation are also stakeholders: the cluster is funded by the GIZ (Gesellschaft für Internationale Zusammenarbeit, German International Development Agency). The Moroccan climate innovation centre (Centre d'Innovation Climatique – CIC), a World Bank project, is the clusters implementing partner. ⁵⁸

In terms of research and innovation, the cluster has a scientific board of nine official agencies. In addition, the cluster partners with the French excellence cluster "Savoie Technolac" on renewable

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⁵⁴ Recherche microélectronique Le cluster MMC décroche des contrats <u>http://www.leconomiste.com/article/903469-recherche-micro-lectroniquele-cluster-mmc-d-croche-des-contrats</u>

⁵⁵ Les clusters au Maroc, <u>http://www.marocnumericcluster.org/index.php?option=com_content&view=article&id=42%3Ales-clusters-au-</u> maroc&catid=3%3Aactualitie&Itemid=50&lang=fr

⁵⁶ RFI, Maroc: les ambitions de l'immense centrale solaire Noor de Ouarzazate, <u>http://www.rfi.fr/afrique/20170403-maroc-ambitions-immense-centrale-solaire-noor-ouarzazate</u>

⁵⁷ Cluster Solaire, à propos du cluster, <u>http://www.clustersolaire.ma/le-cluster-solaire/a-propos-du-cluster/mot-du-president/</u>

⁵⁸ Cluster Solaire, gouvernance, <u>http://www.clustersolaire.ma/le-cluster-solaire/a-propos-du-cluster/gouvernance/</u>



energies in France, as well as the French national institute on solar energy (Institut National de l'Energie Solaire – INES).⁵⁹

The clusters activities are various: the cluster has an incubator, a service to accelerate the market entry of products, advisory services and a business network.

In terms of collaborative research, the cluster supports its member businesses through four activities: by capitalising existing studies, by identifying research opportunities, by helping the businesses to define their research plans (including funding), and by connecting relevant stakeholders with one another. Six working groups are active in the cluster and eight projects have been conducted since 2014.

This cluster benefits from strong official support, as well as support from international donors in a promising branch, booming in the country, and it seems promising for EU-Morocco cooperation.

⁵⁹ Cluster Solaire, nos partenaires, <u>http://www.clustersolaire.ma/le-cluster-solaire/nos-partenaires/</u>

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Cluster policies and programmes in 4. Morocco

The diversity of cluster-types in Morocco is the result of the large array of cluster policies: since the 2000's, Morocco has seized the importance of cluster collaboration and has enacted a number of policies to foster their development. The cluster policies, leading to the creation of the clusters mapped above, emerge from three different authorities: The Ministry of industry, investment, trade and digital economy (MCINET), the Ministry of Agriculture, and to a lesser extent, the Office of development and cooperation (on cooperatives).

Cooperatives 4.1.

Clusters are not a completely new concept in Morocco: the aggregation of businesses, in the form of cooperatives, in traditional economic sectors such as small-scale farming and handicraft, is a long-standing phenomenon. If cooperatives are not clusters in the European sense, they are nevertheless important initiatives, as they demonstrate the capacity of local businesses to cooperate in order to improve their products and increase their sales.

The first cooperatives have been created in 1937, under the initiative of the colonial authorities. The 62 cooperatives created then, have had a positive impact on the development of traditional activities and some are still operational nowadays. After proclaiming its independence in 1956, Morocco enacted a large array of policies – accompanied with subsidies – to support the creation of about 2000 cooperatives. Yet, the state support conducted to a greater dependency of cooperatives and subsidies, with little or no results in terms of growth. As a result, the State withdrew its support to cooperatives as of 1983. Cooperatives have re-emerged as a tool for growth and innovation in the 2000's, under another shape. They henceforth aim at supporting highvalue added farming products, through production and transformation process, notably around rare resources like argan and aromatic plants. 60

To date, cooperatives are supported by the National Initiative on Human Development ("Initative Nationale du Développement Humain") enacted in 2005. The policy supports the creation of cooperatives through a simplification of the legal framework of their activity. Unlike what was done between 1956 and 1983, the State does not subsidise the cooperatives anymore, but provides them with fiscal incentives. The explosion of cooperative structures in Morocco since 2005 (2000 cooperatives to date) prevents the Office from Development and Cooperation to provide all of them with technical support. This does not prevent cooperatives to flourish, assisted by sectoral federations and united through a national union, which ensures that their interests are preserved.

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⁶⁰ Office du Développement et de la Coopération, historique des cooperatives au Maroc, http://www.odco.gov.ma/fr/content/I%E2%80%99historique-des-coop%C3%A9ratives-au-maroc

⁶¹ Saïd Ahrouch, Les coopératives au Maroc, Enjeux et Evolution, Revue Internationale de l'Economie Sociale (RECMA) n° 322, pp 23-27 http://poyu.recma.org/sites/default/files/recma322 023026 0.pdf



4.2. Agropoles

In the agro-food sector, the **Green Morocco ("Maroc Vert") policy** enacted in 2008 addresses the overall agriculture strategy of the country. Notably, the strategy implies to improve the country's productivity using technology and promotes exports. Because of this double aim, clusters became a convenient tool. On the one hand, it allows to foster research on productivity and quality. On the other hand, it is an institution encouraging EU-Morocco partnership, both in the fields of research and commercialisation.

As a result, the Green Morocco policy does not promote clusters as such but creates a favourable environment for cluster-like structure to exist. So far, the Green Morocco policy has led to the conception of two agropoles in the country (of which, only one is still active).

Despite important state efforts to use agropoles for exports purpose, the case of the Agropole Olivier shows that agropoles are especially turned towards the development of collaborative research.

4.3. Industrial clusters

The industrial clusters of Morocco mapped above, have emerged, for most of them, thanks to **Morocco Innovation Strategy ("Stratégie d'Innovation Maroc") 2009 – 2014** enacted by the Government of Morocco. The government created simultaneously the Moroccan Centre for Innovation ("Centre Marocain d'Innovation" – CMI) to implement the strategy.⁵²

The innovation strategy had five objectives: innovate to foster the country's competitiveness, enable Morocco to produce new technologies, channel the R&D capacities of Moroccan universities, attract researchers, and develop entrepreneurship and innovation culture.

To reach these objectives, the strategy was divided in four axes, addressing:

- The governance and regulatory framework of innovation;
- Infrastructures and clusters;
- Funding and support to innovation;
- Mobilisation and attraction of talented people.

The infrastructures and cluster policies aimed at enabling the emergence of technological and industrial clusters, and to stimulate the development of innovative collaborative projects, with the objective to create five clusters and 100 innovation projects before 2013. To enable the development of clusters, the government created a support to clusters' fund of 62 million dirham (€ 5.5 million) on three years, as well as an innovation funds and technical support from MCINET.⁶³

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⁶² Usine Nouvelle, Maroc, "Que faire du Centre Marocain de l'Innovation?" par Hamid Bouchikhi, <u>https://www.usinenouvelle.com/editorial/que-faire-du-centre-marocain-de-l-innovation-par-hamid-bouchikhi.N301779</u>

⁶³ Stratégie Maroc Innovation, <u>https://www.finances.gov.ma/Docs/2012/daag/5048_strategiemarocinnovation.pdf</u>



Five of the clusters mapped above - Océanopôle Tan Tan, Agadir Aliopole Cluster, Maroc Numeric Cluster, Morocco Microelectronic Cluster and CE3M – emerged under this programme. It was observed in the cluster mapping, that three out of five of these clusters are not active anymore.

The Moroccan Innovation policy was not renewed after 2014, and The Moroccan Centre for Innovation, created on purpose, got dismantled.

The cluster policy hence merged with the national industrial policy: The Plan for Industrial Acceleration (Plan d'Accélération Industrielle) 2014 – 2020, designed and implemented by the MCINET. As described in section 2.2, the industrial strategy does not directly address clusters. Nevertheless, in the manner of the Morocco Green Plan, its goals – i.e strengthening existing value chains to improve their integrated development, whilst providing them with financial support, in order to increase exports - provide an enabling environment for the creation of clusters. In addition, its support measures are specifically designed to support cooperation in value chains. As a result, this strategy encourages professionals from the sector to constitute themselves in clusters, to benefit from development funds, fiscal incentives and export support.

The Maroc Denim Cluster, an offshoot of the AMITH, captures the capacity of a well-structured value chain to create a cluster to follow the national industrial policy, in order to make its business thrive.

The specific case of the Solar Cluster

Unlike the industrial other clusters, the Solar Cluster creation and development is not attached to the MCINET but to the Masen, a state agency gathering the prominent public stakeholders:

- the Minister of energy, mines, sustainable development,
- the Minister of general affairs and governance, the Minister of land planning, habitat and urban policies,
- the Minister of interior,
- the Minister of economy and finances,
- the president of the Hassan II fund,
- the joint general manager of the national office for electricity and drinkable water, as well as
- the general manager of the Society for energy-related investments,
- under the presidency of Mustapha Bakkoury, appointed directly by the King of Morocco.

In terms of energy, the King launched the Noor project on solar energy (which now counts four power plants), in 2009. The potential of this new source of energy got fully grasped in the 2030 energy policy, enacted in 2011, which aims at having 42% of renewable energies in the policy mix by 2020 and 52% by 2030.

The energy policy does not say anything about cluster. Instead the cluster is perceived as a way to reinforce the sector, in order to reach the strategy's objective. In addition, it is directly piloted by the Masen. This unique governance landscape explains why the Solar Cluster is the only of its kind.

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European



5. Conclusions

The report aims at providing an overview of Morocco's economy, existing clusters and cluster policies, in order to analyse their potential for EU-Morocco cluster collaboration.

Morocco's economy, both with its agriculture and industrial sector is very much export-oriented. As a result, the country's farming and industrial policies are designed to target the European market. In terms of cooperation, four strategic sectors have been identified: agro-food, textile, ICT and electronics, as well as renewable energies. These fours sectors have been selected for three reasons:

- First, they constitute major segment of the Moroccan economy and are already welldeveloped. Three of these sectors are on the rise (agro-food, renewable energies and ICT/electronics), whilst the third one textile, is under restructuration after a strong decline as a result of global competition;
- Second, all three sectors structure target European markets. Importantly, all three sectors innovate to meet the evolving needs of the European markets;
- Third, they are actively supported by the Moroccan authorities, in terms of development, growth and exports.

Three types of clusters can be identified in Morocco, arising from different policies, themselves emanating from various institutions:

- The cooperatives, are supported by the Office of development and cooperation, where small-businesses, usually in traditional sectors (farming and handicraft) aggregate to increase, valorise and transform their production;
- The Agropoles, are supported by the Ministry of agriculture, in the field of agronomic development;
- The industrial clusters, are supported by the MCINET, and gather SME, research institutes and the authorities, of a same value chain (with the exception of the Solar Cluster, which is an offshoot of Masen);
- The technoparks, supported by various programmes.

In terms of policy support, **public authorities are major drivers** in the creation and functioning of clusters in Morocco. Even the cooperatives and agropoles, described respectively as business-led and research-led above, are heavily supported by public authorities.

An important feature of Moroccan clusters is that public authorities, notably the MCINET, are at the inception of the clusters, and not the businesses that constitute them. This high involvement of public authority is an encouraging sign for EU-Morocco cluster collaboration. This involvement can however be fluctuating, depending on the strategies set in the country. This renders uncertain the future of Moroccan clusters.

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Thank you note

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- Gnomon; Cluster expert Alain Tubiana on ongoing cluster related cooperation; information exchange in January/February 2017

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