The Green Morocco Plan: The Major Principles and Advances of Morocco’s Agricultural Strategy

In 2008, Morocco adopted the Green Morocco Plan aiming to make agriculture into a driver of the national economy over the following fifteen years. To attain its ambitious goals, the Green Morocco Plan targets small and medium-sized family farms and entrepreneurial farms with large fields and access to capital. In the space of a few years, Morocco has considerably increased public investment in the agricultural sector, the result of which has notably been a rise in the amount of land under cultivation, drawing the interest of many West African agricultural development stakeholders. This brief discusses the origins and main principles of the Green Morocco Plan. It then looks at the main accomplishments of the first phase of this strategy before examining what lessons West Africa could potentially learn from it.

I. The Green Morocco Plan: Origins and Guiding Principles

A. Why Was the Green Morocco Plan Launched?

Respond to the food crisis. The Green Morocco Plan (GMP) was launched following the 2007-2008 food crisis. It is a testament to the renewed interest in agriculture after this sector had been relatively abandoned by the government starting in the 1980s. Launched in April 2008, Morocco’s new strategy aims to speed up growth, reduce poverty, ensure that the agricultural sector is sustainable and consolidate its integration in national and global markets. The GMP targets a doubling of agricultural GDP in the space of 10-15 years, the creation of 1.5 million jobs in the sector, and a two- to threefold increase in agricultural incomes [1].

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\text{10 dirhams} = 0.90 \text{ euros or 600 CFA francs (May 2016)}
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Shore up agricultural performance. In 2008, the agricultural sector accounted for approximately 15% of GDP and more than 40% of jobs (approximately 4 million people) [2]. Some value chains (tomatoes, citrus fruits, etc.) received heavy investments (notably in irrigation) and have imposed themselves on the international market. But most farms operate on very small surfaces and have not benefited from hydraulic developments. Rural poverty is rife in the country.

Improve the food trade balance. Food dependency has increased for staple products (soft wheat, seed oils, sugar). Food self-sufficiency in cereals and legumes varies between 50% and 70% depending on the year, but sits at 100% for fruits and vegetables, red meat and milk. The food trade balance—in surplus until the early 1970s—had fallen into the red (excluding seafood products), with a shortfall of 2 billion dirhams by the time the GMP was launched [2].

Timeline: Morocco’s Agricultural Strategy Since Independence [3]

[1] 10 dirhams = 0.90 euros or 600 CFA francs (May 2016)
B. What Are the Green Morocco Plan’s Major Principles?

Two pillars for two production modes. The Green Morocco Plan consists of two pillars. The first targets the aggressive development of high-added value agriculture partially focused on export, while the second pillar is destined to provide solidarity-based support for small farming [2]. Large farms receive different forms of support: investment aid and low rent for land over a long period of time in exchange for investment pledges. Small farms receive subsidies to set up individual or collective projects (tree planting, olive pressing plants, etc.). These subsidies sometimes cover up to 100% of the investment cost. The Pillar I receives the bulk of financing: when it was launched, the GMP planned to implement 1,506 projects (of which 961 in Pillar I and 545 in Pillar II) for a total investment of 147 billion dirhams (75 billion for Pillar I projects and 20 billion for Pillar II projects) [1].

‘Dual’ Agriculture

According to a 2008 evaluation based on the 1996 census

- 750,000 small and medium-sized farms
- 600,000 micro-farms
- 50,000 agricultural ‘companies’
- Farms that have access to the market, credit and information, located in irrigated zones or where rainfall is favourable.
- Farms located in unfavourable zones (‘bour’, mountain or oasis zones). Small and medium-sized farms can grow into agricultural enterprises.
- Agriculture may be just a side activity for micro-farms.

The GMP seems to have relied on a 2008 evaluation of the agricultural sector that highlighted the ‘dualism’ of an agricultural system composed of a ‘modern’ sector and a ‘traditional’ sector. It also took inspiration from the 2007 ‘Agriculture 2030: A future for Morocco’ forecast, which differentiated between agricultural companies and ‘social’ agricultural [4].

A new stance for the government. In launching the GMP, the government reasserted the agricultural sector’s importance for the country, but did so without intervening as heavily as it had in the 1960s and 1970s. It sets the GMP’s priorities for each region in consultation with the agricultural profession. It then calls on private operators—through financial incentives—to implement most of the schemes. The GMP puts an end to the management of agricultural lands that had been entrusted in the 1970s to two large public companies. This land is now rented to private investors.

Create ‘one million agricultural enterprises’. At independence, the goal had been to develop irrigation over one million hectares. The GMP for its part wants to create ‘one million enterprises’. To do so, it must ‘professionalise’ small and medium-sized family farms, encouraging them to adopt strategies based on investment, specialisation and stronger market connections [5].

Aggregate producers. The GMP places aggregation at the heart of the agricultural development strategy. Concretely, this takes two forms: organising small farmers into cooperatives, and contracting between small farmers and large agricultural firms or agroindustry. The aim is partially to replicate experiments deemed to have succeeded in certain value chains: tomatoes in the south, strawberries in the north, and even milk and sugar. The government subsidises aggregators to invest in processing equipment and advise the aggregated farmers.

Regional-scale implementation. Regional agricultural plans have been drawn up by the Ministry of Agriculture and the regional departments of agriculture, whose role was solidified with GMP implementation. Based on sector diagnostics in each region, these plans identify ‘flagship’ value chains. They set numerical targets for these value chains in terms of increases in cultivated land and production. They then define the projects that will make it possible to attain these targets. Agreements have been signed in which each region pledges to work to accomplish the tasks set out in its plan. The olive sector and the fruit and vegetable sector figure among the GMP’s ‘flagship’ value chains.
The Green Morocco Plan’s Major Accomplishments Since 2008

A. Pillar I: Develop Contractualisation and Agribusiness

Contracts with inter-branch bodies. The first pillar is implemented through two types of actions: programme contracts and aggregation projects. The programme contracts are signed between the Ministry of Agriculture and inter-branch organisations. A 2011 law defines a formal status for these inter-branch organisations and 19 programme contracts had been signed by the end of 2015. These contracts list a series of actions aiming to improve organisation, production and productivity in the value chain over a 7-to-10-year period. Each contract sets the responsibilities of value chain stakeholders and those of the government. Implementation of the programme contract provisions plans for investments estimated at nearly 142 billion dirhams, one quarter of which should be covered by the government [6].

Aggregate small farmers. Aggregation projects for their part involve contractualisation: one relatively large stakeholder (one hundred or so hectares minimum and processing capacities) promises to accompany and then buy the output of a group of farmers. The ‘aggregator’ is generally an agroindustrial owned by an investor or, more rarely, a farmers’ cooperative. These aggregators are supposed to provide the bulk of the funds to invest in Pillar I projects (for example, building a processing plant). They receive government subsidies to provide farmers with technical advice, loans and inputs, and to invest in agricultural product processing [5].

Complex contractualisation. Contractualisation is relatively little developed outside the value chains where it had already existed prior to the GMP (milk, sugar, oilseeds) [5]. Several things can explain these difficulties. In Morocco, there is a lack of trust between farmers and agroindustrial firms. This is said to be due in part to the power imbalance in negotiations that weighs against the ‘aggregatees’ and difficulties fulfilling pledges by the parties involved. Mechanisms to monitor relations between aggregatees and aggregators and shore up farmers’ organisations’ negotiating power could help improve this dynamic [5].

B. Pillar II: The Green Morocco Plan’s Major Innovation

‘Projects’ are the foundation of Pillar II. The second pillar relies on government subsidies allowing small farms to invest. Three types of projects are implemented in this framework: production intensification projects (improving productivity), projects targeting a reconversion into higher-value added crops (mainly from cereal crops to rainfed or irrigated fruit tree growing), and diversification projects to generate supplementary incomes (local products, for example). The GMP took its inspiration from the fruit tree growing project launched in 2007, that aims with strong government intervention to reconvert cereal crops located in rainfed zones into fruit plantations, which are seen as a priori less sensitive to rainfall hazards. To take advantage of these projects, farmers must form cooperatives or associations and provide 10% to 20% of the total project cost (non-cash contributions in the form mainly of labour or the provision of land to build processing plants). At the end of 2011, the Agricultural Development Agency (ADA) had already validated 325 Pillar II projects, for a total of 10 billion dirhams of public investment. Of these 325 projects, nearly two thirds concern fruit and vegetable production (mostly olive, almond and date plantations) and approximately one third livestock (mainly cattle) and beekeeping [5].

Production-centred projects. Most of the projects launched have sought to increase production and improve farmers’ organisations’ marketing capacities. In many cases, the projects implemented have enabled a significant increase in production, but they have sometimes had
somewhat unforeseen consequences on prices. A study in the Fès Boulemane region thus noted price drops for apples and olives that were harmful to farmers because of the overproduction of certain years and farmers’ difficulties selling their output at good prices [7]. An agrifood strategy is, however, in the finalisation stages. ‘Agrohubs’—concentrating processing and packaging firms, distribution platforms, and research and training centres—aim notably to improve integration between the agricultural upstream and the industrial downstream. Two are operational and four others are being built or under study.

Still little participation among farmers. Pillar II projects can be initiated by farmers, cooperatives, local associations, regional departments of agriculture, or even chambers of agriculture. From 2008 to 2011, the vast majority of Pillar II projects were elaborated by public offices. Since then, farmers’ groups have proposed projects, some of which were accepted [8]. Several factors determine farmers’ capacity to propose projects, such as the level of education or prior experience in project implementation [7]. Insomuch as these projects initiated by farmers yield the best results, the Ministry of Agriculture has sought to encourage farmers to participate. Some observers have noted progress in this area in recent years, but emphasise that provincial departments of agriculture do not have sufficient skills and human resources to accompany farmers’ groups that have weak development project design capacities. Unfortunately, these farmers are often the poorest and most vulnerable farmers [8].

A complex structure. The dynamic of grouping farms into cooperatives has been more or less successful. Some regions, notably in the north of the country, have little experience with collective organisation. Cooperatives were created from scratch to access available funding in the framework of Pillar II, but several of them have encountered considerable management and collective organisation difficulties. There was little support setting up these cooperatives given the gap between the number of projects implemented and the human resources available in public offices [8].

### Pillar II Projects and Farmers’ Participation

Many Pillar II projects deal with fruit production using a similar schema: a company is in charge of planting the young trees and taking care of them the first two years. Farmers then take over responsibility for them. These projects often include the provision of handling and processing equipment (olive presses, for example). A recent study was conducted on one such olive production intensification and valuation project in two villages in the Saiss region (in the central north). It describes the project design and implementation process. It shows that the farmers have only little influence over project design and implementation. In one of the two villages, they did however learn how to obtain public financing and were later able to successfully implement several projects.


### C. Farmer Support: A Growing Field

**Agricultural advice affected by structural adjustments.** The advice system has been heavily affected by the structural adjustments since the 1980s. This advice is above all technical and managerial for farms and farmers’ organisations; while crucial to make Pillar II projects sustainable, it is little developed [9].

**Towards coverage by the private sector.** A reform of the system has been underway since 2012. The basic principle of the reform is delegating agricultural advice from the public service to the private sector with the target of 80% of agricultural advice provided by private structures, agricultural professionals or advisory services by 2020. A law passed in 2013 gives agricultural advisers legal status. A National Agricultural Advice Office (ONCA, Office National du Conseil Agricole) was created to set up private advisory services in the medium term while revitalising public advisory structures in the short term (agricultural advice centres that replace the former work centres) [5, 8].

**Agricultural training and research.** A national training and agricultural research strategy was also launched in 2013. In mid-implementation, it notably aims to improve coherence and synergies between the various existing structures and progressively increase participation (notably financial) by the private sector. It also aims to set up mixed research units and integrate the GMP’s ‘promising’ value chains in professional agricultural training.
D. Natural Resources: Complex Stakes

Water ‘rationalisation’? The GMP integrates the National Irrigation Water Saving Programme (PNEEI, Plan National d’Économie d’Eau en Irrigation) adopted in 2007 that wishes to reconvert 550,000 hectares of irrigated land with local irrigation techniques (in particular drip irrigation) over 15 years thanks to subsidies of up to 100% of investment costs for small farms. Today, 400,000 ha are said to have drip irrigation. This plan had the unplanned effect of rapid expansion of irrigated land, and was not without an impact on the country’s water resources. Indeed, drip techniques make it possible to irrigate areas that are inaccessible to gravity-fed irrigation. They are also affordable for small farmers (1 to 5 hectares) with the development of informal production and distribution networks [10].

The tricky land issue. Moroccan agriculture is facing many land constraints, notably the complexity of land regimes and tenure modes, as well as the splintering of farm lands. The 1996 census indicated that 70% of farms were run on lands of less than 2.1 hectares [2]. To date, the reforms have mainly concerned the rental of land previously managed by public companies to private investors. A National Conference on the government’s land policy and its role in economic and social development was held from 8 to 10 December 2015 to solicit reform proposals, which are as necessary as they are complex.

The development of Access to Financing for Small and Medium-Sized Farms

In response to the lack of medium-term finance options for small farms that do not have access to classic banking institutions (notably because they do not have land titles), Crédit Agricole du Maroc set up a agricultural development financing company called ‘Tamwil El Fellah’ in 2010. The system is backed by a government prudential stabilisation fund (100 million dirhams), covering 60% of potential defaults. At the end of April 2016, Tamwil El Fellah had granted nearly 700 million dirham in loans to approximately 67,000 small farms. The loan repayment rate at term was 98%. Most of the loans (70%) had been granted to finance investments (dairy farming, irrigation, farm equipment, tree plantations, etc.). The amounts and repayment due dates are suited to small farmers’ situation. The loan amounts (up to 100,000 dirhams per farmer) never exceed 20% to 25% of the farmers’ incomes [11].

III. Africa’s Growing Interest in the Green Morocco Plan

A. Why Is West Africa Talking About the Green Morocco Plan?

A ‘model’ policy? More and more West African agricultural development stakeholders (national authorities, farmers’ organisations, technical and financial partners) are taking an interest in the Green Morocco Plan. Côte d’Ivoire and Mali are said to have expressed their desire to adapt this plan to their realities in the framework of their agricultural development plans.

South-south cooperation. The cooperation between Morocco and sub-Saharan Africa has been stepped up in recent years, notably for agriculture. Efforts were made to improve road and air connections with countries located in the southern Sahara. Many events (conventions, fairs, exchange visits, etc.) have been organised, and are as many opportunities for Morocco to promote the GMP. Many students and interns attend the major schools and universities in Morocco, and Moroccan experts have begun to work in the southern Sahara. This cooperation also has an economic dimension. The Office
Chérifien des Phosphates (OCP), which is 95% owned by the Moroccan government, and which owns 75% of the world’s phosphate reserves, is currently elaborating an ambitious plan to supply African markets with fertiliser [12].

B. Many Avenues of Thought for West Africa

Public investment on its way back. The Green Morocco Plan marks a strong comeback of public investment in the agricultural sector. The Ministry of Agriculture and Fisheries’ budget thus quadrupled between 2008 and 2015, going from 150 to 680 million euros. In 2015, the total budget devoted to agriculture and maritime fishing came to 950 million euros [13]. Insomuch as a large share of this financing comes from loans, it remains crucial—notably for taxpayers—that spending is as efficient as possible. This is an important point for West African states, whose budgets and borrowing capacities are, however, smaller.

Development opportunities. The Green Morocco Plan sets forth formal procedures for Pillar II project design, and notably when it comes to finance allocation decisions. For farmers, mastering these procedures would allow them to increase their latitude for action. Some farmers’ organisations are already able to design projects that meet their needs and defend these projects to the offices in charge of granting financing. Others find it more difficult to do so [8]. This project dynamic offers interesting prospects, particularly as West Africa has many well-structured farmers’ organisations. The GMP experience is a reminder of just how much farmer training and support are important, notably when it comes to farm management and collective organisations.

Foster access to credit. Crédit Agricole du Maroc has developed an interesting approach in response to the obstacles standing between small farmers and access to credit, obstacles that also exist in most West African countries: small farm size, strong weather and economic variability, lack of land titles, almost non-existent farm insurance, low education levels among the population, etc. The government’s and some of its partners’ pledges to guarantee loans made it possible to develop this financing offer.

Diversify to increase security. The Green Morocco Plan is based on a value chain approach targeting the specialisation of small farms according to production basins that are in the process of being formed or organised. But, faced with the growing quantities produced, farmers have encountered marketing difficulties in years with high yields. The diversification strategies that small farms have long employed are still a crucial element in their viability and resilience in contexts of high economic and climate variability. The Green Morocco Plan can foster this diversification when it makes it possible to introduce new crops on family farms. More broadly, the GMP considers family farms to be enterprises and sees agriculture as an economic sector ‘like any other’. But for many farmers, agriculture is a ‘mode of life’ rather than just an economic activity. Family farms’ rationales are not merely economic.

Value chain approach or territorial development. In Morocco, several observers have insisted on the limits of a value chain approach. Intensive and irrigated systems can, indeed, face the risk of overproduction in an open market (with imports) or because of limited demand and export difficulties due to issues with quality standards. In rainfed zones with family farming on small surfaces, such an approach has difficulty allowing these farms to generate sufficient incomes [7]. The Ministry of Agriculture seems to have become aware of the limits of sectoral approaches in these zones. An inter-ministerial standing committee on the development of rural areas and mountain zones was formed in February 2013 to conduct a territorial approach to the development of such areas. An integrated development programme for mountain zones was validated in July 2015. Endowed with 50 billion dirhams between now and 2025, it will be rolled out in the country’s 12 regions. A similar strategy had been developed in October 2013 for oasis zones and argon trees. These strategies target social upgrading, highly regionalised integrated projects, and a policy of opening up and major projects [14].

The challenges of duality. There is currently a general debate underway on ‘dual’ policies containing a component targeting large industrialised properties and another devoted to small farms. According to some, such an approach makes it possible to provide effective support to small farming inasmuch as it devotes specific tools and financing to small farming. For others, such policies run the risk of trapping family farming in the register of solidarity, pushing it out of the agricultural economic sector, and ultimately leading to the absorption of ‘small players’ by ‘large players’ [15]. This debate seems difficult to resolve at this time. In the case of the GMP, the two pillars present similar rationales. The Green Morocco Plan affirms its desire to go beyond the traditional dualism of
Moroccan agriculture by helping small farmers behave like entrepreneurs. Several examples of Pillar II projects contribute to this, although the challenge of supporting the most marginalised farms remains to be overcome.

**Liberalisation and food security.** The Green Morocco Plan approach still relies on developing export agriculture (especially fruits and vegetables), notably through the signature of free trade agreements. Entered into force in 2012, the agreement with the European Union provides for an elimination of customs duties on 55% of total imports from Morocco in exchange for immediate 45% liberalisation—then 70% liberalisation in 2022—for the European Union’s exports to Morocco. According to Ecorys analyses on agriculture, the cereal sector should be the biggest loser from this agreement (2.7% drop in production over the long term) whereas the fruit and vegetable sector should benefit from the agreement. Several observers worry about the consequences such agreements may have for the country’s food security and sovereignty [3].

**Conclusion**

The Green Morocco Plan breaks with the 1983-2008 period by placing agriculture back at the heart of national priorities. Unlike the 1960s, attainment of targets relies on private stakeholders and farmers’ organisations and on the development of production capacities in both small farming and agribusiness. Beyond these changes, the GMP is a continuation of previous policies: the aim is to develop agriculture for promising value chains using a productivist approach (intensifying production through mechanisation, irrigation, input use and genetic improvements) with an eye to improving national food security and increasing agricultural exports. It would be interesting to conduct studies measuring the impact of the GMP on agricultural sector performance and the processes vitalising or marginalising the most fragile farms.

The agricultural policy model cannot of course be replicated identically in West Africa because the agronomic, climate, economic, social and political conditions there are different. The Green Morocco Plan does however offer interesting lines of thought or inspiration, such as the need for heavy public investment in favour of agriculture and food security (using government revenues and budget aid), the reaffirmed need to support family farming, the provision of financial resources for farmers and clear rules on how to access these resources, and even the development of innovative financing tools based on the banking sector and guarantee funds.
REFERENCES


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