

**Diversification of non-oil economy - Emergency plan for the acceleration of
economic growth in Algeria**

**Diversification de l'économie hors hydrocarbure – Plan d'urgence pour
l'accélération de la croissance économique en Algérie**

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Abstract

Diversification of non-oil economy in Algeria has become an essential dimension of its development policy because it has been confirmed that excessive dependence on natural resources carries risks. Moreover, ending Algeria's dependency on oil could be achieved by investing in new non-oil industrial sectors. The strategic vision for the industry in Algeria should be fully modernized in order to adapt to the demands and expectations of the global economy, and to the opportunities it offers as well. Indeed, Algeria must reorient its investments from the extensive model to the intensive model, focusing more on generative investments, innovation and modernization of the productive system. For this, our study attempts to present the methods and means to be used to diversify the Algerian economy while putting at the heart of the analysis the necessary industrial diversification, investment, restructuration of industry and innovation. The major challenge of boosting economic growth through industrial diversification is the essence of the present communication.

Keywords: Potentialities- Industrial diversification- Economic growth- Algeria.

Résumé

La diversification de l'économie hors hydrocarbures en Algérie est devenue une dimension essentielle dans sa politique de développement car il a été confirmé que la dépendance excessive des ressources naturelles est porteuse de risques.

Par ailleurs, la sortie de la dépendance au pétrole pour l'Algérie pourrait se réaliser en investissant dans de nouveaux secteurs industriels hors hydrocarbures. La vision stratégique pour l'industrie en Algérie devra être entièrement modernisée afin de s'adapter aux exigences de l'économie mondiale et aux opportunités qu'elle offre. En effet, l'Algérie doit réorienter les investissements de l'extensif vers l'intensif, en misant davantage sur les investissements productifs, l'innovation et la modernisation de l'appareil productif. Pour cela, notre étude tentera de présenter les méthodes et moyens à utiliser en vue de diversifier l'économie algérienne tout en mettant au cœur de l'analyse la nécessaire diversification industrielle, l'investissement, les industries structurantes et l'innovation. Le défi majeur d'impulser la croissance économique via la diversification industrielle constitue l'essence de cette communication.

Mot clés: Potentialités- Diversification industrielle- Croissance économique- Algérie.

Introduction

Given that Algeria has a fundamentally hydrocarbon-based policy, its economy remains vulnerable and highly sensitive to exogenous shocks. Today, in a world that is changing on all fronts (geostrategic, political, economic, etc.), the country is querying for issues that could help it to break away from this chronic dependence on natural resources, and develop a dynamic and diversified growth strategy (Benachenhou, 2008; Benhammouda, 2009) . Despite numerous attempts at implementing some reforms, both organic and financial, the Algerian economy is still dependent on hydrocarbons. This is certainly due to the absence of a wealth-creating non-hydrocarbon economy that is still very weak and uncertain (Chiha & Tigharsi, 2014). These observations lead us to say that despite all the efforts made, the economic situation of the country remains the same (broken economy) (Mouhoub, 2009). Therefore, diversification must be

considered as the only lifeblood of the country. The Algerian economy is still dependent on the export of oil whose price volatility is irrational and unpredictable (FMI, 2014). To this end, the question that arises today is the following:

What are the industries that could put Algeria on a new growth path?

In order to find an appropriate response to this question underlying the polemics regarding the diversification of the Algerian economy, it would be very interesting to check this state of affairs, given the results of so many sectoral analyses that have repeatedly stipulated that Algeria meets all the conditions and has all the assets to make the difference in several niches which could represent a lever of growth and strong dynamism for the national economy.

Industrial Diversification in Algeria

Algeria possesses good bases to offer substantial development opportunities (Banque d'Algérie, 2015). Today, the real challenge is to break away from the growth model that is essentially based on oil and move to that founded on new industrial specializations in order to build real national and regional industrial champions (Diagne, 2005). Indeed, everyone agrees that Algeria has all the capacities to leave the sphere of underdevelopment and become an emerging country. For that, it must adopt a business strategy as part of an internationalization of its industrial sectors if it wants to boost non-hydrocarbon exports. Foreign participation, whether in the form of Foreign Direct Investments (FDIs) or partnerships, would appear to be essential and fundamental for this purpose (Djoufelkit, 2008). Admittedly, foreign investors have not developed a real economy for the country, but their contributions in terms of growth and technology transfer is a fact accepted and supported by most economists. Foreign

Direct Investments (FDIs) contribute to the economic growth, create jobs, increase the available capital and participate in the formation of new capital in the host country; most often, they serve as conduits for the transfer of production technologies, skills and know-how, innovation capacities, and modern organizational and management practices. In addition, FDIs can help local economic operators to have easier access to foreign markets and international marketing networks (Benachenhou, 2006). To succeed the ambition of emergence, and thus improve its exports and foreign trade, Algeria must value its investment potential, by multiplying economic meetings and discussions at all levels.

It is certain that in Algeria there is urgency to develop a reliable industry, today. Several experiences accredit this option, and the case of Indonesia in particular can be cited as an inspiring example. The industrial world has evolved in recent years. The share of intermediate goods in international trade has now risen to 60%. This percentage is even more important in the economies of several countries like Germany, South Korea, Turkey, etc. Algeria could follow such economic models. The challenge for the Algerian economy is therefore to develop medium tech industries by establishing a subcontracting policy with major equipment manufacturers of spare parts and electronic components (World Economic Forum, 2015). The imperative is therefore to build a quality productive system and install an effective organization in order to meet, first, the growing domestic demand, and then hope, eventually, to export to other countries, especially African countries. This would require the creation and development of promising sectors with the necessary human, technical and financial resources (Guesmia , 2015).

New Industrial Specializations in Algeria: A Challenge that Needs to be Addressed

Algeria understood the need to prioritize the sectors that need to be developed in order to ensure strong added value, guarantee the return on both investment and capital and give a clear and robust vision for growth to productive investors (Guesmia, 2016). In this respect, we must underline the dynamic changes experienced by some Algerian industrial sectors in recent years. Undoubtedly, Algeria can see today the difference as foreign capitals begin to timidly bring their first fruits (Rapport Doing Business 2014). Nowadays, Algeria has to consider investing in, for example, the vehicle and machinery assembly industries, basic industries (steel and petrochemical), agri-food industry, pharmaceutical industry, digital industry and green industry, which have all become priorities. Therefore, the decision makers and partners concerned must have the will and courage to meet the necessary conditions for the success of such an operation. Algeria can thus invest in a number of structuring and innovative industries that can offer significant advantages and high potentials which could undeniably help the country make the difference and be competitive at the regional, continental and even international level.

The Potential of the Automotive Industry in Algeria

The automobile industry in Algeria represents an activity whose development is only in its infancy. The potential offered by the Algerian market is not negligible; there are strong economies of scale with low labor costs, and a growing domestic demand with more than three million vehicles. It should also be remembered that Algeria has the largest vehicle fleet in the Maghreb and the second largest on the

African continent. In addition, the transition to a market economy offers a strategic position for the country to export vehicles, particularly to African countries. Moreover, as previously mentioned, foreign direct investments (FDIs) did not begin to develop in Algeria until the mid-1990s (privatization law), and it is also appropriate to point out that, despite the essentially extractive logic of investment, the automobile sector did not started benefitting from these investments until the beginning of the 2000s. Algeria is a dynamic market, particularly from the point of view of new vehicle sales. It must be admitted that the automobile market is in the process of reconstruction and structuring, especially after the difficulties the country had experienced during the black decade. It was not until the end of the year 2014 that Algeria managed to manufacture its first car at the Oran plant (a factory owned 49% by the Renault group, 34% by the National Company of Industrial Vehicles and 17% by the national investment fund). Regarding the industrial vehicles, the heavy-duty segment is the only automobile sector that has a 70% integrated production site (Diagned, 2005). The National Company of Industrial Vehicles (Société Nationale de Véhicules Industriels – SNVI) produces three ranges of vehicles, namely high-end vehicles which are based on Renault models, assembled locally from Renault Trucks components and engines. Then, low-end vehicles are produced and equipped with Diesel CIRTA engines (Deutz license from Germany). There is also the Tractor Motors Complex (CMT) in Constantine; and the mid-range vehicles that are equipped with Deutz engines. In addition to its own network, the National Company of Industrial Vehicles (Société Nationale de Véhicules Industriels – SNVI) has approved many agents, for the maintenance of its vehicles, all trained by the company.

Furthermore, three joint venture companies were created in 2011, as part of the implementation of the Algero-Emirati-German agreement protocols for the development of the national mechanical industry. The first one is the Algerian heavy truck company, assisted by Mercedes-Benz corporation, and installed in the small town of Rouïba; the second one is the Algerian company for the manufacture of Mercedes-Benz vehicles in the Wilaya of Tiaret and the third one is the Algerian company for the manufacture of engines of various German brands (Mercedes-Benz, Deutz and MTU) in the region of Oued Hamimime, in the Wilaya of Constantine. In accordance with the provisions of the 2009 complementary finance law, Rouiba Corporation will cooperate with the Emirati Investment Fund and the German company Daimler as a technology partner. According to some observers, the concept of partnership, as defined, seems to contribute to the achievement of the three major objectives set out in the national industrial development strategy, namely a high-potential employee program, a real technology transfer program, and an adequate know-how and knowledge transfer program. There is also the Volkswagen/Sovac assembly plant which, after a long period of hesitation and controversy, was formalized on 27 November of the year 2016 between the Algerian and German parts. Based in the Wilaya of Relizane, this factory assembles four different models, namely the Volkswagen Golf 7, Volkswagen Caddy, Seat Ibiza, and Skoda Octavia. The cost of this investment amounted to 205 million Euros, for an annual production that is supposed to reach the figure of 100,000 units planned for each year. No less than 250 direct jobs are planned for the first year and 1,800 in the fifth year (ONS, 2014). The staff should benefit from specific training in the automotive trades and adapted to each job. The arrival of Volkswagen through this

partnership aims at consolidating and further developing the mechanical industry in Algeria in order to make it competitive regionally and internationally. However, this is still insufficient in comparison with other countries around the world, especially our neighbor countries such as Tunisia and Morocco who have become serious subcontractors of major global manufacturers. Despite the advantages and potentialities offered by the Algerian market, the automobile industry is still struggling to solve certain problems, as evidenced by the incapacity of developing a reliable industrial network, which is still at the embryonic stage. The qualification level of employees is too low and skills are lacking at the local level. For example, the Renault-Algeria factory, which, in our view, is actually only a form of "*disguised import*" for which local subcontracting is almost non-existent and marginal. Moreover, the local integration rate is only 12%, due to the lack of automotive suppliers; therefore, most of the spare parts come from the factory and logistics center of Renault in the town of Pitesti in Romania (99% of spare parts are imported and 1% are produced locally).

The High-Tech Sector: A Vehicle for Growth and Development

Just like what happened in the other Maghreb countries, the free access to information professions in Algeria took place within the framework of liberalization of the telecommunications sector, which means privatization of the historical operators and global deregulation of the market. Thus, Algeria could play a key role in the telecommunications industry in which its development would seem to be wholly possible in light of the human capacities at its disposal. Here again, wages are unfortunately lower compared to those of engineers in developed countries. There are good computer scientists in Algeria; they proved

their skills whenever the opportunity was offered to them. In this sense, it is regrettable that the rapid development of telephony, especially in recent years, has not given any impetus to the creation of related jobs, such as what is happening in other countries like Morocco, Tunisia, and Egypt. Moreover, beyond these strengths and weaknesses, the fact remains that it is essential for Algeria to mobilize Foreign Direct Investments (FDIs), develop partnership, and constitute competitiveness clusters, which are effective means that must be seriously taken into consideration. These should help to develop a strong proactive integration in such an industrial specialization, on the one hand. The development of outsourcing in certain niches, as shown by the experience of some Asian countries, proves to be necessary to achieve the desired objectives, on the other. However, this is not without risks. Indeed, one can call to mind the case of Tunisia where these clusters have become true economic and technological enclaves, without any real link or impact on the national economy and society (Dahmani and Ledjou, 2011).

Furthermore, electronics is another sector where Algeria has strong potential. Electronics activities represent a sector where value chains are well integrated, even across national frontiers. For example, a product manufactured in the USA may consist of parts produced in Hong Kong and other components made in Singapore; each of these countries may be specialized in the fabrication of a particular segment of products, for which it has a comparative advantage. It would be futile for a country to specialize in all segments of a production process. The electronics industry is a high value-added sector, where Algeria could develop a strong leadership by fitting into the international value chain. Therefore, the concerned actors have to take courageous and challenging

decisions. The field of Electronics offers various opportunities that may lead to successful experiences in, for example, consumer electronics (televisions, computers, etc.) and specialized electronics to make high-tech products (automotive electronics, medical, etc.).

Admittedly, these capital-intensive products require a strong mastery of production costs and, among other things, innovation and mastery of technologies for which the foreign experience is strongly needed. It must be recognized that this can only be possible by creating an attractive environment. Therefore, Algeria must think to offer advantages in order to attract the great regional and international champions. The national computer industry needs to develop a reliable strategy with clear medium and long term objectives; it must be supported by the government through a public sector which must be a vector of scientific and technological development that could only be achieved with the active involvement of engineers with high qualifications and skills, and trained in national institutes and universities, which, in turn, can benefit from the knowledge and know-how of various foreign partners. It is worth recalling that Algeria was a pioneer in the field of computer science in Africa and the Arab world in the 1970s and 1980s. It is also useful to remember that the first higher institute of computer science on the African continent was the Center for Studies and Research in Computer Science (Centre d'Etudes et de Recherche en Informatique - CERI), today known under the name of National Higher School in Computer Science (Ecole Nationale Supérieure d'Informatique - ENSI), which has produced hundreds of quality engineers (.

Renewable Energies: A Potential for Algeria's Reindustrialization

Renewable energies (Photovoltaic panels and components, inverters and data acquisition devices, solar transformers and batteries, thermal mirrors, solar water heaters, solar air-conditioning systems, solar pumps, etc.) offer great opportunities for the reindustrialization of the country. The renewable energy market is estimated to be at over \$ 60 billion by 2030, with the possibility to create 135,000 new jobs (ONS, 2015). Nevertheless, the development of a real renewable energy policy requires significant investments. The creation of renewable energy sectors could allow our country to move from the simple supplier of crude hydrocarbons to that of producer and exporter of processed goods and information services. Thus, the agro-food industries, petrochemicals, metallurgy, electro mechanics, pharmacy, logistics, creative industries, nanotechnology and green industries are all emerging and undeveloped industrial activities in which Algeria could become competitive and have comparative advantages. These are some of the few actions that the public authorities should take seriously into consideration in order to allow the emergence of new models of development, based on innovation, know-how and knowledge.

Prerequisites for Success

During the last few years, a large number of industrial investment projects have been carried out in Algeria, particularly in the automotive mechanical industry. This was possible with the collaboration of foreign partners, and in particular with French, Italian, Chinese and Arab investors. It is perfectly normal to wonder about the future of reindustrialization of the country which will certainly come to reinforce the potentialities of the Algerian economy and strengthen the regional and international integration of exports. On the other hand, it is also noted that certain institutional and regulatory configurations are still incompatible with the

need to initiate an industrial dynamic that relies particularly on the fragmentation of global value chains. The rigid exchange rate regime and customs policies and procedures, in addition to the stiff bureaucracy (especially the property taxes), and corruption, are all problems (Djouflkit, 2008) that will certainly discourage potential investors. Therefore, it is up to the government to reassess the contribution of investors in the future and see how it can help them achieve their development and industrial competitiveness goals. It is also required to insist on the creation of a real political and institutional will with good economic governance. It is urgent as well to accelerate the process of structural reforms and to conclude a win-win partnership with a business environment conducive to value-adding initiatives. This is a reliable approach for the development of profitable industries and the promotion of new industrial specializations. The improvement of these industries can be strengthened by helping actors to conquer international markets, as this will be a real opportunity for improvement of the Algerian economy, particularly in view of the potentialities and assets that Algeria has. In addition, its proximity to Europe makes it even more competitive in the assembly and processing industries; it is a solid relay especially for Chinese manufacturers who are increasingly interested in the Algerian market in the assembly of vehicles and the production of spare parts; they see in Algeria a real base of re-exportation towards Europe and Africa. Therefore, Algeria should abandon the obsolete classical industrial visions that seem today to guide the strategic choices, especially the strategy of import-substitution which is based on protectionist measures that are prejudicial to competitiveness. Over the last few years, these measures have led to border closures, and loss of export markets. In addition, it is necessary to exploit the opportunities offered by some innovative

methods of investment support and partnership encouragement (project funding, offset agreement), provided that public companies, and even solid private companies, get involved and play the role of strategic partners.

This absolutely requires that Algeria has a real industrial strategy that defines exactly the sectors where it intends to develop competitive advantages in the global market (Lamiri, 2013). The strategic objective is aimed at establishing a proactive public policy and make crucial business commitments in the direction of innovation in order to significantly change the economic situation in Algeria, particularly by taking action on innovation management and developing high-tech partnerships at the international level. It is also important to think of strategies and policies for economic recovery and industrial development for the creation of attractive businesses or clusters which currently constitute an essential tool for developing the attractiveness of territories and industrial competitiveness. It is essential to promote the industrial growth in Algeria by boosting competitiveness clusters in very specific areas and developing local initiatives based on horizontal and vertical networks. The aim of these centers of excellence is to create links with strong and responsible local actors whose aim is to foster cooperation in the search for innovation and development. In fact, we can consider three types of actors, namely companies, initial or continuing training centers, and public or private research units. Algeria could eventually have the capacity to design and develop technologically innovative and economically viable products and services. The public authorities must support these operations by offering financial assistance that will contribute to the functioning of these business clusters and to the financing of joint projects. As such, it appears that the approach of the Ministry of Higher Education and

Scientific Research was prescribed by the actual socio-economic situation of the country (center for innovation and technology transfer, integrated campus and competitiveness clusters). To do this, it is important to take into account the following points (Leghima, 2004). First, value the existing human capital, second encourage the entrepreneurial culture, third favor research and development and finally inculcate a culture of innovation.

The Algerian authorities must act in favor of international cooperation (openness to international trade and Foreign Direct Investments to facilitate the transfer of technologies). The application of these various measures will certainly favor local and regional industrial development. By following these strategies conscientiously, Algeria can embark on the path of industrialization (OMPI, 2016).

Conclusion

Today, to get out of oil dependence and to diversify its sources of financing, Algeria must develop an optimal growth model that can only be built through industrial diversification. In addition, foreign assistance, both financial and technical, is essential. Indeed, it is urgent to proceed with the identification of the national industrial potentials by sectors and by regions in order to put in place an appropriate tool for our economic redeployment. Thus, it must be admitted that the industrialization of the country is an emergency plan for national development. The new economic vision must be accompanied by an "efficient" economic administration. The new growth model of the country must be based on new industrial specializations (structuring and innovative industries), based on innovation and knowledge, with high added value, and which can help to create wealth and jobs. The government must then orient its strategy towards the urgent

implementation of deep structural reforms to improve the business environment and to create favorable conditions that lead to sustainable economic growth.

Bibliography

1. Banque d'Algérie, « stabilité macroéconomique et financement bancaire de la croissance », Alger, 11/06/2015, p2.
2. Banque mondiale, Rapport Doing Business 2014, « comprendre les réglementations pour les petites et moyennes entreprises », 11^{ème} édition, p3.
3. Benabdellah.Y, « Emergence : quels enseignements pour l'Algérie », colloque international, « l'Algérie face aux défis de la mondialisation », MSH Alpes Grenoble, février 2011.p58.
4. Benachenhou.A, « Les nouveaux investisseurs », Alpha Design, 2006.
5. Benachenhou. A, « Pour une meilleur croissance ». Ed. Alpha Design, 2008.
6. Benhammouda.H. « d'une diversification spontanée à une diversification organisée », Revue économique, vol60, 2009, p140.
7. Chiha.K et Tigharsi.E, “essai d'analyse de la problématique de diversification des exportations hors hydrocarbures”, Revue algérienne de mondialisation N°05-2014, p12.
8. CNES, « Rapport de conjoncture économique et sociale », novembre 2015, p26.
9. CNES, « statistiques de commerce extérieur de l'Algérie », rapport 2015, p12 et 13.
10. Dahmani. A et J.M. Ledjou, « le développement des télécommunications dans les Suds ».Tic & société(en ligne) Vol.5, no 2-3, 2011. Consulté le 24/03/2015.

11. Diagne.D, « l'industrie automobile française au Maghreb : caractéristiques des marchés et stratégie d'acteurs », DGE, document de travail, 2005, P12.
12. Djoufelkit. H. « Rente, développement de secteur productif et croissance en Algérie », Document de travail, AFD, No.64, 2008, p16 et 17.
13. FMI, Rapport des services pour les consultations de 2016 au titre de l'article IV, N°16/127, mai, 2016, p29.
14. Forum économique mondial, rapport sur la compétitivité en Afrique, Genève, 2015, p117.
15. Guesmia. E. « Analyse de la contribution des investissements directs étrangers (IDE) à l'économie des pays en développement : cas de l'Algérie ». Mémoire de Magister, Université de Tizi Ouzou, 2016, p 148.
16. FMI, « Algeria selected issues », IMF No.14/342, 2014)
17. Guesmia. E, « renforcement des potentiels de l'économie algérienne à travers la diversification industrielle », séminaire international sur le nouveau rôle de l'université, université de Bourdj Bouarreredj, Algérie (21 et 22/11/2016).
18. Lamiri .A. « la décennie de la dernière chance, émergence ou déchéance de l'économie algérienne ? », Chihab éditions, 2013, p238.
19. Leghima. A. « la difficile promotion de PME innovantes en Algérie », document du travail, cahiers du LAB.RII, N°279, 2014, p23.
20. Mouhoub.S. « les vulnérabilités : cas de l'Algérie », ENAG, Alger, 2009, P194
21. OMPI(2016) (l'Organisation mondiale de la propriété intellectuelle, rapport sur l'indice mondial de l'innovation).
22. ONS, rapport sur l'activité industrielle , année 2012/2013, collections statistiques N° 180/2013, p7.

23. ONS. « l'Algérie en chiffres », N°44, édition 2014, p41.
24. ONS, “activité, emploi et chômage”, N°654, 2014, p05.
25. Rebah. A, « Économie algérienne, Le développement national contrarié ». Ed. INAS, Algérie, 2012, p138.