

## Futuristic Vision for Integrated Regional Planning in Syria:

Cross-border development axes, challenges, and benefits

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**Abstract**—Based on the strategic vision of the Chinese government to build the new Silk Road Economic Belt. This paper aims to discuss the new Sustainable development scenario in Syria, according to "shaped: 卅 Gōng: hands joined". SWOT analysis of the information collected for proposing a new development axes that constitute a schematic depth of the coastal region. Thus, to be the base to lead the development process and reconstruction in the future due to local and international properties. Also, to keep pace the strategy of "One Belt One Road" as one of the most important cross-border development axes in this century. The goals are to the creation and development of urban communities through the Sustainable Structure. Targeted range of inner and border cities by the concept "Hub & Gateway". Thus, forming an integrated economic belt to attract investments to inward regions, and provide access to energy sources detections in the coastal region. The results show that proposal scenario presents one of the most important up-down strategies for alternative spatial regional development plans in Syria after the war.

**Keywords**-Balanced development; Development strategy; Energy resources; Hub & Gateway; Sustainable development.

### I. INTRODUCTION

The historic Silk Road is considered one of the most important factors that led to the prosperity of all the cities and countries that have passed through it. Syria was, because its important geographical location in the world's map, and the major Eastern gate of the Mediterranean Sea, a stable station and a crossing for the major routes and sub-routes [1]. The Silk Road was not only a trade route but was also the main reason of cultures and traditions exchange among different communities on its estimated extension 6478 km [2]. China realized the importance of the Silk Road trade, so the Chinese government launched the appropriate formula for the current century within the globalization and opening-up policy. Hence, based on multiple experiments on the regional level to achieve balanced regional development. Therefore, the main integrated economic belt with national dimensions towards the world had been created entitled "One Belt One Road" [3, 4]. On the other hand, Syria as a developing country, the regional planning experience is a

recent experience, dating back to 2005 through the initiative launched by Syria with the United Nations through the Municipal Administration Modernization program (MAM). The aim was to improve the local administrative state within well-studied plans in various structural urban, administrative and environmental development areas of six governorates [5]. Moreover, then to work with the Japan International Cooperation Agency (JICA) in 2007, to reach the improvement of developmental reality by building a strategy for sustainable development. The agency has concluded its work on the schematic level to the presence of 11 urban developmental axes, which should work to activate and invest them to required sustainable development [6]. Until creating the Regional Planning Commission (R.P.C) under the Act 26 of 2010, as an independent body with enforceable and accessible recommendations to the public and private sectors, to find a new ground for the comprehensive spatial planning at the national level [7]. So that Syria is divided into seven regions, based on administrative, economic, demographic and geographic bases.

For that, this paper discusses whether the foundations of the current regional planning in Syria are suitable for achieving sustainable development, post-war reconstruction and building the new infrastructure and settlements. It also discusses the current reality of the seven Syrian regions in dealing with the sustainable development's main backbone at the global level through new trade routes.

Therefore, this paper proposes by demographic, historical data of the targeted Syrian regions, an integrated structure of sustainable development. Based on the creation of new national development axes, depending on the revival of the old historic axis "the historical Silk Road" with the proposed multi-use coastal development axis, and associated with the current vital north-south development axis within the integrated planning system.

The paper concludes by discussing how to promote the idea of the development axes, and the link between areas and economic bridges throughout the state to achieve the spatial balance, development and integration to become the basis for the national development plans in the future.

## II. REVIEW OF THE CHINESE DEVELOPMENT STRATEGIES

The Chinese government is always working to find the appropriate planning formula of the Chinese geographical reality by a large extension. Fill the gap in the development reality between the different parts & regions through various sources and varying possibilities imperative. Therefore, since 2000, China has sought through launching a national strategy under the name of "Grand Western Development". To find the right developmental formula of western regions that suffer from weakness in development, compared with the eastern coastal regions, due to a high regard within the worldwide economic, industrial and commercial properties [8]. Moreover, since the historic Silk Road which was passing through the Chinese west starting from Xi'an city towards the west to Europe is the oldest example that provides good lessons of the schematic integration idea. By creating development axis based on the present century necessities to focus on finding interrelated economic belts through which a balanced distribution of national income takes place.

The idea of the continental bridge [New Eurasian Continental Bridge- NECB] which connects China with the West was created in the twentieth century based on the concept of that historical axis. However, quickly turned into a major economic belt [Continental Bridge Economic Belt- CBEB] based on a complex net of transportation including Railway, Highways, Airports, power transmission lines has helped together in the achievement of economic interdependence between the regions, which passes through them all. [9, 10].

Soon the NECB was upgraded by the highest levels government support through expanding transport networks and creating the necessary infrastructures to revive the historical Silk Road within "New Silk Road Economic Belt" strategy. Launched by the Chinese President Xi Jinping in September 2013. Then he stressed the importance of investment cooperation between the relevant countries to find the core ground for the current century economic development process. In a statement on 09 November 2014 he said: "China would put \$40 billion into a special 'Silk Road fund' to drive investment in infrastructure, and speed

*industrial and financial cooperation in Central and South Asia" [10].*

It constitutes one of the four giant economic belts at the level of China within the strategic vision (Two Vertical Lines & Two Horizontal Line). "Fig. 1". Includes, in addition to it, the coastal economic belt CEB, Yangtze River economic belt YREB and the Beijing- Kowloon Railway economic belt BKREB to form together the "#" pattern of China's sustainable development strategy on the base of integrated economic belts [11]. Thus the linking strategy through the development axis formed a revival and advancement of the interior regions and opened broad areas for investment through it as a strategic depth of other axes and an economical and geographical complement for them.

### A. Background Idea:

Based on the strategic idea of the Chinese government in "New Silk Road Economic Belt" seeking to establish and strengthen partnerships in interdependence among the countries located along the belt at many levels. Aims to achieve the balanced investment, and diverse development, which is considered the backbone of sustainable urban development in the light of the current global economic crisis. However, this strategic idea achieves to open blocked roads in the face of the belt by establishing strategic plans to integrate all the forms of infrastructures, according to high-quality standards, linking basic structure of energy resources and other transport corridors [12].

So a new formula to revive the historic Silk Road in Syria is proposed in accordance the current data and the futuristic outlook, and towards the development of a strategic idea for the integration of regional development plans in the future within the national framework of regional planning. Seeks towards achieving the balanced spatial development which guarantees the reduction of the random growth of cities that led to the infringement of farmland and water resources, heritage and natural areas that are important to the generation's history and future.

Also, return to the Chinese characters for inspiration and inclusion for the philosophical projecting the sites of the proposed developmental axes within the Syrian map on the traditional Chinese writing, Parallel with deep meaning. Therefore, it led to the adoption of the shape "卍 Göng: hands joined" for the development strategy.

## III. METHODOLOGY

This research takes place within the context of a complex planning milieu taking place during the current situation. Hence, by putting the bases of the regional planning by the R.P.C in 2010. The conflict started in Syria in 2011 to withdraw everything back to the starting point. Many scenarios of the total national planning were put on the stage of reconstruction after the war. Based on this, we have adopted in this research the review of Chinese experience on the strategic and regional level. That dealt with the development axes as one of the integrated spatial planning methods. Also, the possibility of projection and implementation of the strategy on the Syrian schematic reality, through the idea of reviving the Silk Road as part of

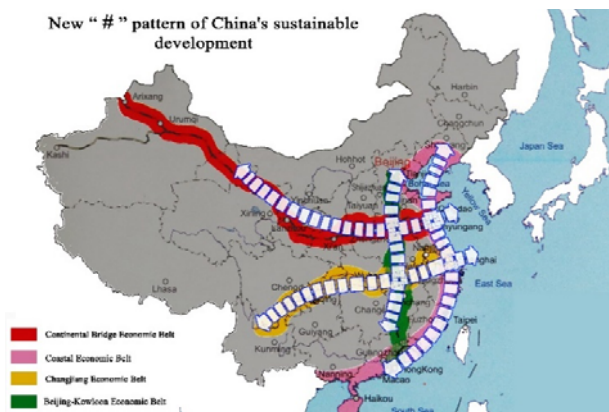


Figure 1. New "# pattern of China's sustainable development strategy, based on (Gao, et al., 2001).

the “One Belt One Road” strategy. Moreover, their effectiveness within the Syrian geo-demographic reality.

So we used the qualitative research, to identify subjectively a description about the past "before the war" and future situation of regional planning in Syria with in a research in strategic plans, using interviews with regional decision-makers. In addition, analysis of Syrian regions possibilities targeted by the proposed scenario (SWOT Analysis), in parallel with extrapolation of the projected impacts for the futuristic application, as an up-down planning model. Data collection based on three main sources. JICA reports in the period between 2005-2008, The first population report in 2008 issued by a group of Governmental bodies, and the National Framework of the RPC in 2012-2015.

#### A. *The research problem and aim*

The planning role in Syria during the past period was limited to the administrative structure work in the regions within the framework of government five-year plans. Hence, led to the development of spatial planning solutions which are geographical area confined by the region borders without paying attention to the coordination and integration. However, that negatively reflected on the demographic distribution of the population [7]. Variation population density among the various regions of the country from 4 to 1514 inhabitants / km<sup>2</sup>. Increasing the proportion of urbanization in Syria from 47% in 1981 to 53.5% in 2010. That means, a continuation of the major cities in attracting industrial and service investments and the consequent attraction of the rural population under the pressure of economic and social conditions and search for job opportunities. Thus, population congestion is increasing the currently populated areas which constitute only 32.5% of Syria's area [13]. Imbalance in the demographic distribution reflected gradually on disparity GDP spatially [14].

All these factors added to the stage of reconstruction focused on not repeating the same mistakes of planning. Work to find the right formula to Break the bottleneck axis of Aleppo-Damascus through an integrated structure of developmental axes. The idea of future sustainable development axes as one of the integrated regional planning application means, an integral necessity for the next phase, reconstruction and building a linking network at the level of infrastructure between the various regions.

Through two main questions:

Why the implementation of the cross-border development axes idea, viable in the future, is necessary for the regional planning in Syria after the war?

And, how can the proposed scenario to participate in the national strategic planning for integrated spatial development between different regions?

### IV. ANALYSIS OF THE REALITY OF REGIONAL PLANNING UNTIL 2011

#### A. *GDP per region*

Syria officially began the transition to a social market economy in the year 2005, regarding the dependence of the

private sector as a partner in the service and development responsibilities, and a shift in the liberal labor laws. Nonetheless, regardless of the employment contraction in the agricultural sector, enabling the Industrial activity to create 100,000 jobs a year, while the aspirations have remained about securing 250,000 jobs per year at least. Moreover, the limits of random growth risk have reached to affect the educated and productive young sector at the national economy level. When the increase of investment in the commercial sector since 2009 creating a temporary polarization, while agricultural and industrial sector suffered from an unjustified decline in multiple regions. The sectoral distribution of GDP shows the importance of which is occupied by the agricultural sector, which constitutes 22.63% of the GDP and 16% of the total registered employment, while the commercial sector represents 23.1% and 16.50% of employment in 2009. With a wide disparity between different regions. [7]. “Chart 1-A”.

1) *Equation of GDP per region*: We have m economic activities listed as [1,2 .. m] where 1 is industrial activity, 2 is trading activity, etc.

$$\text{GDP per Region} = \sum_{n=1}^m \text{Income}[n] * N[n] + C$$

:Where Income[n] refers to the added value per Employee and N[n] is the number of workers per activity, and C = average agricultural income \* agricultural area. “Chart 1-A”.

#### B. *Population per region*

Population growth is estimated at the rate of (2.35%) for the period (2004-2009), one of the highest in the world, which is almost stable at this level for the past ten years. Despite the current exceptional situation in Syria, it is expected to continue during the next few decades, reaching nearly 28 million people in 2025. Therefore, and according to Aleppo- Damascus axis as an industrial, economic and service axis, inhabited by 49.2% in 2010 of Syria's population. Also, in the coastal region as a touristic investment and real-estate development area, 9% of population are in an area of 2.3% only of the total area [15]. The Great Damascus region ranks first in population density [1110.5 pop / km<sup>2</sup>], followed by the coastal region [399.65 pop / km<sup>2</sup>] and then northern [235.18 pop / km<sup>2</sup>] and East [200.49 pop / km<sup>2</sup>], while less in the rest of the regions to reach its lowest level in Al-Badia region [3.30 pop/ km<sup>2</sup>] [7].

#### C. *Syrian commercial exchanges*

The current reality commercial activity in both [export-import] or transit movement through Syria characterized by weak competitiveness and productivity, compared with the strategic location of Syria. “Chart 1-B”. Moreover, the war is destroyed a lot of ground infrastructure [railways and transmission lines]. While the pressure is increased on maritime transport through the ports of Latakia and Tartous. Both ports need to expand towards the marine space to receive large ships.

Practically, focus increased on the Tartus harbor as a safe window towards the west after 2011, led to putting many studies and scenarios to achieve this role in future.



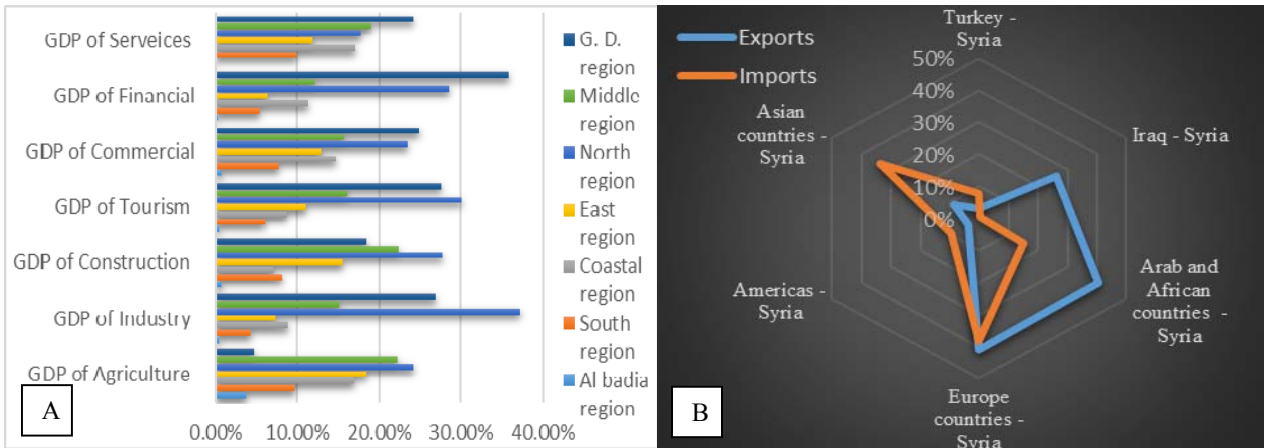


Chart 1.A (Distributes GDP per Region in Syria 2009 by per sector), B (Syrian trade exchanges with various global economic blocs in 2010)

Based on the concept of gateways within the development axes required after the war.

D. Environmental issue

The environmental challenges resulting from the rapid case of global climate change carries two contradictory dual challenges along the presumed growth axes this is due to the internal parts of them. Especially the Syrian Desert suffer from the high drought proportion and the rarity of fresh water sources, but, it has vast areas with high solar brightness, gives the ability to invest as it did some Middle East countries in different geographical situation of the regions.

While the electric power generation from renewable energy. In other hand, the coastal areas will suffer in the future from the sea level rise phenomenon [SLR] (Faour, et al., 2013). Moreover, threatening investment opportunities on parts of it, especially the southern part, which is an important Gateway for the proposed development scenario. Regional Planning Commission, put an integrated plan for withdrawals, fresh water from the Euphrates River or the surplus of the coastal region toward the Great Damascus region. But all these ideas are also linked to the problem of rapid climate change and its effect on the water level of rivers itself.

E. SWOT Analysis: TABLE 1

V. RESULTS OF ANALYSIS

All the aforementioned development challenges have spatial dimensions, therefore, the necessary plans to address them can not be placed without the spatial scope, far of weakness in the Integrated regional planning. and necessary to propose and apply a scenario based on a major network of development axes that penetrates the Syrian depth. Linking areas that suffer from a decline in development reality which located in “Syrian Badia” and the eastern part of Syria, with a good development situation regions in the western and coastal section and the viable ones in the future with sub-axes to include all the areas by the following proposal.

A. The new "shaped- H" for the development strategy

The proposed scenario which is resulting from the formation and development of Tartous - Lattakia [Coastal Development Axis] and the [West East Development Axis ]Tartous - Albu Kamal and its integration with the [North South Development Axis] Aleppo – Damascus. Constitutes the future of the urban, investment, commercial and economic sustainable development.”Fig. 2”. Therefore, the creation of the required infrastructures for transport and trade as it presents the real revival of the historic Silk Road that was up to the heart of the Syrian desert “Badia” in Palmyra and it starts towards Anatolia through Aleppo and to Egypt through Damascus. Moreover, it forms the appropriate planning situation to keep up with the current Chinese strategy of [New Silk Road Economic Belt] in accessing the commercial roads coming from the east to the Syrian coastal ports and from them to Europe. "Syria as a node on the Silk Road can be reborn as a regional outsourcing distribution center poised to take advantage of positive externalities of this neighborhood effect" [16]. At the same time, it provides access to the large newly discovered power sources of oil and gas off the Syrian coast and links them with the power transmission lines through Central Asia. Therefore, the proposed scenario allows the growth of the border of major cities as commercial "Gateways" and the inner cities as development attracting centers “Hubs” along the proposed axes in parallel [17].

B. The axes of the proposed "shaped- H."

Three important Growth and Development Axes with different Characters constitute the new regional planning framework that leads in the future to the construction of the Syrian Sustainable Development Economic Belt.

1) Coastal Development Axis [CDA].

It passes through two coastal provinces within a single region. Four development centers [Tartus, Lattakia, Baniyas, Jableh] It currently has two million inhabitants. Moreover, axis runs along the coastline almost 185 km long which includes the most intensive population in the coastal region. Two main marine gateways, Lattakia's port, and Tartous port.

Represent the largest capacity power and the Syrian maritime trade backbone [18]. Where the overall Tartous port statistics reached in 2010: 2,368 ships entered the harbor, 10,406,423 tons of goods were imported to it and 2,643,264 tons were exported through it. New development of a marina berth by 600 m length, with an important free zone, and the work underway to secure the railway line linking directly the port with the Iraqi Railway, and another toward the Lebanese border “the port of Tripoli” [19]. Also oil terminal in Baniyas, 50% of oil production through Baniyas refinery and 35% of the power output [20]. One civic airport, which is 25 km away from Latakia and the other agricultural airport in the southern part of Tartous.

Its importance had increased when oil and gas were recently discovered as energy sources within the Syrian territorial waters entered its futuristic capabilities agenda after the Ministry of Petroleum and Mineral Resources has launched an international tender for prospection and

exploration works, oil and gas exploitation No. 81 Date 24/3 / 2011. The recent US studies have confirmed the presence of a treasure and a large reservoir of oil and natural gas in the eastern Mediterranean Sea Basin estimated by 122 trillion cubic feet of natural gas and 107 billion barrels of oil [21]. After the Norwegian ANSYS Company has conducted a geodetic survey along the Syrian coasts and territorial waters and discovered through it [22].

So the touristic, investment and commercial axis impact will transfer within the future proposed scenario system in a conical manner from the marine gateways points towards the coastal region in general. Hence, from it to the Syrian inside to turn into a [Coastal Development Economic Belt-CDEB].

2) *East West Development Axis [EWDA]*.

It passes through four regions, three provinces with two border gates. This axis forms a part of the ancient Silk Road in Syria, it through a range of cities like Abu Kamal - Deir

SW OT	Geographical & Demographic & Environmental
Strengths	- An important geostrategic location in the Middle East.
	- An important window on the Mediterranean, constitute an important future hub of international trade and energy.
	- Original Homeland for a branch of the historical Silk Road.
	- Diverse climate, despite the limited space relatively. 185.180 km2.
	- A young community is a good future workforce.
	- A community has a distinct cultural identity of all the regional neighboring.
Weaknesses	- Oil and gas as sources were still untapped in the marine space.
	- More than 43% of the area suffers from the problem of drought.
	- Short shoreline almost 185 km.
	- AL-Badia region (semi- Desert) consider the window towards the East Asian countries.
	- As a reflection of the war, an enormous number of people without work, and especially those working in the industrial and commercial sectors.
	- The migration of Competencies holders to find jobs abroad.
Opportunities	- Low qualified employment.
	- Alternative energy resources.
	- The investment of energy sources in the marine space.
	- An important node on international trade and energy axes” one belt one road.”
	- Cultural & religious tourism pole in the world.
Threats	- New business opportunities, to encourage the return and stability.
	- Rapid population growth after the war.
	- Poor environmental mangement on the regional levels.
	- Negative effects on the marine and land environment , because of pressure on resources
	- Climate change.
	- Increasing the gap between rich and poor.
- Increase of the labor force working under service sectors to improve the Income in the present circumstances.	
- Need for water.	

Urban & regional development & infrastructure	SW OT
- The framework of regional planning, based on strategy of integrated development axes.	Strengths
- Government supports for reconstruction projects.	
- Series of planning studies, in collaboration with international teams.	
- Two industrial zones " Hsiao - Adra " in the middle region and G.D. back to serve again.	
- Historical buildings and natural areas registered on the World Heritage List, promote an integrated tourism industry.	
- Two international ports.	
Weaknesses	- Lack of planning databases after 2011.
	- Limited financial resources and funding.
	- Lack of modern infrastructure interconnected between different regions.
	- Destruction of a large part of the good infrastructure because of the war.
	- Weak infrastructure & public transportation
	- Informal settlements & slums
Opportunities	- The development of the railway networks for greater ease of access and trade flow.
	- Development opportunities in Al- Badia region.
	- Opportunity to an emergence of new growth poles.
	- Opportunity to achieve integrated sustainable development.
	- Planning of the high speed "Tartous- Abu Kamal" train
	- The new airport in Palmyra.
	- Increased of GDP of Al- Badia region.
	- Opportunity to establish a dry port in the middle region.
	- Increase in the tourism sector in inland areas.
	- Opportunities to support other economic activities based on the integrated developmental belts.
- A real opportunity to attract foreign and national investments after the war.	
Threats	- Long term projects take a long time which may affect different fields specially projects in strategic locations.
	- Unplanned and unsustainable development
	- Negative effects of the economic crisis on futuristic investments.
	- Random development in the Coastal Region to increase economic capital during the war.

TABLE 1. SWOT Analysis

al-Zour - Al Sokhna - Palmyra-Furqlus - Homs - Tartous and connects the Iraqi border in the east with the commercial Tartous port in the west. Part of the axis passing through the desert between Deir al-Zor and Homs. Constitutes about 50% of the axis length estimated by 605 km. In another hand, suffers from adverse attracting and polarization movement due to the climate changes. In addition to the spread of drought and the lack of small and medium development projects that provide work opportunities and stability for the population.

Palmyra constitutes the region's center and the heart of the west-east axis and possesses from the special development elements what lead it to play a prominent developmental role of a city that mediates Syria. It is the same city that was a prosperous capital in the Romans days [23]. Moreover, it is the same city that was the focus of the trading caravans coming from the east across the Silk Road. Caravanserai markets and inns were built at the time, where of some those ruins still exist till the present date [24]. The axis distinguished by the existence of two land and sea border gateways [Albu Kamal – Tartous]. Each one of them is qualified to play an important futuristic economic role at the level of the Middle East region as a whole and not only on the level of Syria in the strategy of linking the global trade and power lines and turning the axis into a [Desert Development Economic Belt- DDEB].

### 3) *North South Development Axis [NSDA].*

It passes through three regions, seven provinces and a big group of cities; the most important of them are Aleppo - Hama - Homs - Hsiao - Adra - Damascus and Daraa. The axis distinguished by linking the [Turkish-Syrian] borders with the [Jordan-Syrian] borders. Also, connecting between the industrial capital [Aleppo] and the administrative capital [Damascus]. Axis passes through Homs city the connecting node between the three axes in the proposed scenario and the second populated city in number after the capital, Damascus. The opening of Adra industrial city which is considered the most important free zones and a commercial hub at the national level and a region to attract and localize investments. In fact, China has entered the investment market in Syria through "China City" in Adra Industrial City, established by entrepreneurs from the wealthy Chinese coastal province of Zhejiang [25]. Moreover, Hsiao city for investment industries also increases the importance of the axis. Of course, the axis is part of an international development axis with an economic and commercial weight within the Arab States transportation Convention in ESCWA organization, called the M45 road. As well as, it is part of the Mediterranean basin European transportation project, which proposes connecting the Mediterranean countries to achieve the economic communication [26]. It, thus; represents an economic belt with all its elements [North - South Economic Belt – NSEB].

The previous three economic belts by the proposed strategic scenario that penetrate most of Syria's lands represent the integrated and unified economic belt and the engine that will drive forward the overall development process in time leaps that would be considered treasured in the post-war phase. So both the NSEB and the CDEB will

form an attractive base and foundation for investments in all its transportation, touristic, commercial and economic forms. While the DDEB will play a role as part of the new Silk Road in the direct and rapid access to the Western ports, allowing investment opportunities and the emergence of attractive urban communities within a currently not invested geographical area. Moreover, has the highest solar energetic stock in Syria that is expected to reach to 1,000 MW / hour according to the study prepared by the DESERTEC German company of desert technology [27].

## VI. DISCUSSION

By discussing the "shaped-卍" proposed model scenario, the proposed development strategies of its axes, the resulting areas and their future expected growth, and the futuristic and current environmental challenges we come to the following visions:

### 1) *The strategic superiority of the DDEB + CDEB in the scenario of development axes in Syria [The extended wing].*

It can be seen clearly after the potential futuristic possibilities and data analysis of DDEB & CDEB the integrated link of the two axes in the balanced development strategy compatible with the regional planning body. The regions along the two axes possess rich sources, an overlapping history, and beautiful environmental scenes. This leads us to launch the name of [Syria's futuristic golden extended wing] on it. The CDEB area that is rich with natural resources of fertile plains, mild climate, agricultural wealth and the strategic stock of fresh water resulting from the ongoing freshwater springs and the fresh springs under the sea along the coast. In addition to having great touristic elements through the territorial waters with a dimension of 12 nautical miles from the coastline and an approximate area of 3866 km<sup>2</sup> [28]. Area characterized by a gradual depth continental shelf totally accessible for tourism and urban investment in the future, thanks to the topography of the submerged Marine bed [29]. In another hand, a huge amount of both natural gas and oil was discovered in this area. Of course, this discovery of large energy sources is an additional motivation to the commercial motive that puts the investment objective in front of China along the "golden wing" and considers it a Chinese-Syrian natural investment part within the Silk Road revival strategy. Hence, it would make the CDEB along with all the opposing marine space, practical within a multi-use urban structural setting.

At the same time, DDEB forms a natural extension and a channel through which the GDP growth of CDEB withdraws toward the Syrian Desert. Allowing to revive parts of them that will form urban communities and development attraction centers in the future, supported by a modern infrastructure of transport roads, a railways network, that will be an integrated infrastructure extension of the [One Belt One Road].

### 2) *The NSEB advancement "upgrade" and the opening of geo-economic integration fields with the regional neighbors.*

The "shaped-卍" proposed scenario of growth axes contribute to finding in the future a new spatial dimension of NSEB with the high GDP that stationed at the two key



development poles Aleppo and Damascus through the emergence of sub-axes development that arise from the geographically integrated DDEB with the CDEB. It starts from Deir al-Zor towards Aleppo, and from Palmyra to Damascus and Deraa constitutes three geographical Islands in the northeast corner “Turkish- Iraqi- Syrian borders” and the South East corner “Jordan-Iraqi- Syrian borders” and an island in the mid of Syria. These geographical triangles carry and possess various energetic and natural elements that make it contain the economic support that is resulting from the NSED a good development environment to open different investment areas in order to access the quality products away from the current resources depletion and insuring attractive jobs opportunities for residents. Thus transforming the entire area of the country to what looks like a huge engine that works in an integrated manner to achieve at the end the required for balanced development distribution over specific periods of time.

### 3) Triple development equation

[DDEB + CDEB + NSEB] are considered the balanced equation within the Syrian geography, as integrated with the advancement of the infrastructure destroyed during the war. Resulting from the encouragement of linear growth on both sides of the axes, and then cluster deployment. Based on the sub-axes, that creates an opportunity building urban communities attractive to residents as a result of the possibilities and opportunities, achieving several goals:

- The decoding bottleneck of the coastal region as a safe area for more than two million IDPs, some of them began to stability.
- The creation of a new economic axis synonymous for [NSDA]. Moreover, this constitutes a real opportunity to increase the rate of resettlement in the Syrian Desert within the framework of securing good income and jobs.
- Alleviate the demographic concentration along the main industrial axis between Aleppo-Damascus.
- Give the opportunity through [CDA] to find the necessary ground for the establishment of a light and medium-sized industrial investment in the coastal region. Especially the food industry and some medical industries. Therefore, the re-distribution of the Syrian industrial map.
- Golden-wing [DDEB + CDEB] also, considered the future of sustainable tourism through the Silk Road tourism axis "historic cultural within the Syrian desert," towards the innovative rural tourism in the coastal region.
- New strategy non-conflicting with the goals of R.P.C, but rather an integrated and harmonious with it.”Fig. 2”

### 4) Environmental Challenges

The coastal region can play a vital role in securing fresh water from the surplus water that is resulting from the investment of fresh marine springs, and then withdraw them through a water supply network toward the interior regions to secure freshwater [30]. Alternatively, through the idea of seawater desalination by treatment stations that are located in the southern part of the current investment offered coastal

axis, then move it inward. In both cases, the process must be integrated by establishing refining and processing stations in the desert to re-use the output as a water source for irrigation or industry or livestock. On the other hand, it can invest the possibility of electric power generating from solar energy in the interior desert regions with high solar brightness in the operation of desalination stations instead of solid fuel [31]. As one of the schematic structural integration applications between the proposed growth axes.

While it is possible to put defensive strategies for areas threatened by rising sea levels along the coastal development axis. Based on the analysis of the contrast continental shelf possibilities and working on the establishment of gradually expanding and viable defensive Islands in proportion to the SLR problem. Acceleration to form at the end advanced defensive lines of the vulnerable areas and new rules of the touristic –commercial expected human activity as one of the under discussion scenarios [29].

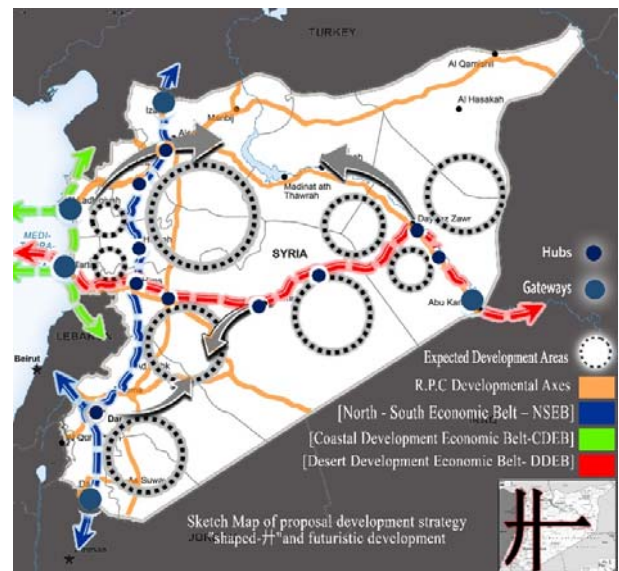


Figure 2. Sketch Map of proposal development strategy "shaped-卍"

## VII. CONCLUSION

Included within this paper, we present a new concept and a futuristic vision of the regional planning process in Syria based on the suggestion of integrated development axes passing through the various Syrian regions to be a model of an integrated planning when putting regional charts in the future. Development axis which is capable of growing and forming cross-border development axes and then economic belts with national dimensions in the future. Considering that infrastructure “highways - railways - power lines” represent the main artery. While depositing the vital cells on both sides “Services - facilities - limited Industries – investments” as elements generating new communities to establishing urban and economic competitiveness areas. [32]. Keep pace with the Chinese strategy in reviving the silk road with its historical background in Syria. Will lead to various investment

attraction bases towards the Syrian inside, combined with a sophisticated infrastructure network Compatible with linking power lines, trade, and transport requirements. So that, able to be the director to put the suggestion of regional planning alternatives and uses of land at a later stage. Hence, It is a direct embodiment of the planning up-down model in moving by the pyramid planning series. In the end, this strategy is the base that will effectively contribute to the reconstruction and revive the process of the different Syrian regions after the war in standard time stages.

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