

THE ROLE OF VIRTUOUS AND VICIOUS CIRCLES AT SUSTAINABLE DEVELOPMENT IN CONTEMPORARY IRAN A HISTORICAL AND INTERDISCIPLINARY APPROACH

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Abstract: This article concerns the historical circles among economy, culture, politics and ecology in contemporary Iran in order to show how the Iranian contemporary history has been in fluctuation in virtuous and vicious circles. This article is basically influenced by an interdisciplinary theoretical approach by Acemoglu and Robinson. Therefore this article studies the Iranian evolutions in three time periods, 1970-1977, 1989-2006, 2006-2014 with a historical approach to show how in different periods moving towards social pervasive institutions leads to an enhancement in life qualities, economical indicators and a healthier environment, vs. challenges in vicious circles despite economical growth or primary social stability results to the decrease of trust and social investment and life quality and the deterioration of economical indicators and even a wide destruction in environment. This article shows there has been an alternative change from moving towards a sustainable development in contemporary Iran or vs. receding from this course, also how there has been an economical, political and environmental relationship.

In these three periods, there is a different relationship between the economical and political institutions and also the environment. Although in the first period of study the pursuit of governmental policies have lead to an economical boom, yet due to the exclusivity of the political and economical institutions, not only there is no sustainable development but ultimately social instability is formed. In the second period the economical institution slowly moved towards inclusivity and the political institution moved to the same path with a few years of delay. It was in the second period that environment was considered as a social concern and became significant in policy. The interaction among economy, policy and environment created a positive trend in social institutions. In the third period, first the policy institution moved towards being monopole, whereas the economy institution despite the primitive significant increase of income and other criterion confronted a wide RENT. In this period the environmental concerns became less important. The result of institutional interaction in this period was crucial environmental situations and also a vast decline in economical criterion.

Keywords: abstractive, historical approach, institutions, inclusive institutions, sustainable development, virtuous circles, vicious circle

PROBLEMATIC ISSUE

The development and nondevelopment of a country such as Iran is the result of long time historical evolutions. The history of the contemporary Iran does not show the same procedure. It seems that the contemporary Iran has at least traveled three different paths in the last 40 years. From a political aspect the development of the contemporary Iranian evolution should be divided to four different groups. From 1969 to 1979 which leads to the revolution. From 1979 to 1989 Iran struggles through the war and basically its developmental programs are neglected due to the importance of the first years after the revolution. From 1989 to 2006 the developmental policies are practically close to each other and very continuous and finally from 2006 to 2013 when a different government

comes to rule the developmental approach changes. If we disregard the second ten years when the country had been busy with war, these three categorizations will be reasonable, each having different approaches towards development.

This article aims to follow the institutional relation among the economical, political and environmental institutions in these three eras from a sustainable development aspect. Therefore the main question of this article is how was the relation between the economical, political and environmental institutions in Iran and how have they affected the sustainable development in Iran?

Theatrical Approach

This article uses two theoretical approaches. First, we are influenced by the sustainable development approach. In this view we should concern future needs such as current needs. Therefore we should concern impacts of the human development. Second, we are influenced by the Robinson and Acemoglu(2012) in the book, "Why Nations Fail". The concept of sustainable development has developed over the last 20 years. "In 1987 the UN Environment Commission, chaired by Gro Harlem Brundtland, defined sustainable development as: "... development that meets the needs of the present without compromising the ability of future generations to meet their own needs". Now known as "the Brundtland definition" of sustainable development, this is a virtuous but imprecise concept, open to various and often conflicting interpretations. This however remains a global standard. It addresses the needs of both the present and future generations in terms of environmental resources. The definition Brundtland coined may well be the biggest single imperative for global development in the 21st century. The consequences have been enormous (Edwards, 2010). The sustainable development as mentioned in the UN conference and the Rio de Janeiro conference in 1992 and Johannesburg in 2002 is a result of institutional relations among culture, economy, politics and ecology(UN: Sustainable development) As the former United Nations ex-general secretary- UN Secretary-General Kofi Annan- states: "Far from being a burden, sustainable development is an exceptional opportunity - economically, to build markets and create jobs; socially, to bring people in from the margins; and politically, to give every man and woman a voice, and a choice, in deciding their own future". Sustainable development is "environmental, economic and social well-being for today and tomorrow" (iisd: What is Sustainable Development?).

The second theoretical approach studied in this article is the Acemoglu and Robinson theory which rejects geographical, cultural and other competitive theories. Instead it presents an alternative that focuses on history and junctures that shape the path of economical and political institutions. This research enables us to recognize the origins of differences in poverty and prosperity. "In addition, it enables us to account for the lay of the land today and why some nations make the transition to inclusive economic and political institutions while others do not" (Acemoglu and Robinson, 2012 : 10).

In this theory inclusive economical and political institutions are against extractive economical and political institutions and the relationship between them is most important. In this point of view "different institutions have different consequences of a nation, how prosperity is distributed, and who has power. The economical growth which can be induced by institutions creates both winners and losers" (Ibid: 26). Political and economical institutions drive from the history of a society. They can be inclusive or extractive. In the first state they encourage economical growth and in the second state they become impediment to economical growth. "Nations fail when they have extractive economic institution supported by extractive political institutions that impede and even block economic growth" (Ibid: 24).

In society there is a strong synergy between political and economical institutions. In extractive political institutions, a limited elite that has power, uses their power to achieve economical resources therefore who wins in economy depends on the distribution of political power in society. In sum, in this theory sustained economic growth is always the consequence of institutional trend of the society and the relation between different institutions. These trends make vicious or virtuous circles. As they mention: "countries differ in their economic success because their different institutions, the rules influencing how economy works, and the incentives that motivate people" (Ibid: 8).

These three eras include:

First Era: The Fourth Constructional Programs (1968-1972) and the Fifth Program (1973-1977): the appearance of the Revolutionary Conditions

Second Era: First to Third developmental Programs from 1989 to 2005: from the economical adjustments to political developments

Third Era: from 2005 to 2011: the Illusion of Return

The First Era: The Fourth Constructional Programs (1968-1972) and the Fifth (1973-1977): the Appearance of the Revolutionary Conditions

The Economy

The Fourth constructional program to be implemented in 5 years (1968-1972) was adopted by the national parliament. The main purpose of the program in grand scale was a 9 percent economical growth. Other main important objectives were: a more equitable of income distribution via producing jobs and spreading social and recreational services, the decrease in the amount of commodity from abroad by increasing the internal production power, eliminating necessary necessities and acceleration in agriculture, creating variety in exported goods and improvement in administrative services through an evolution in the administrative system.

The pattern of this program was a comprehensive economical programming through econometric and a program strategy, replacing import, helping the private and governmental investment and the price stability. The economical objective of the program was a yearly 9 percent growth and achieving 8.56 percent growth income in the country (Organization for Programming & Management, 1968: 1-18). The overall achievements of the program were accepted because of the realization of the programmed objectives in production growth, productivity and economical stability. The overall economical growth was about 11.2 percent yearly which was 2.2 percent more than what was expected according to the program.

In the fifth era we confront an unexampled increase in the oil income in Iran plus the increase of credits more than the Iranian economical capacity which had unequal growth in economical sectors throughout the country and led to concerns in all economical and social foundations in Iran. The results of the fifth program in the first three years of its work-1973, 1974, 1975- based on the national account was the growth of gross national production without oil to stable prices respectively 16.6, 16.7 and 18.6 percent (The Iranian census department, 1976:543). Overall we can say we have faced a high economical growth which had been caused mostly due to the high rate of oil. The level of resources had a strong increasing procedure.

The Policy

New economical conditions and the emergent of new social stratum create the demand for participation and the accessibility of power positions especially in urban area.

The increase in the Shah's power was as a result of the oppression of opposition, increasing in oil income, centralization in bureaucracy and strengthening the security organizations which have bend political participations before the revolution (Shiroudi, 2008).

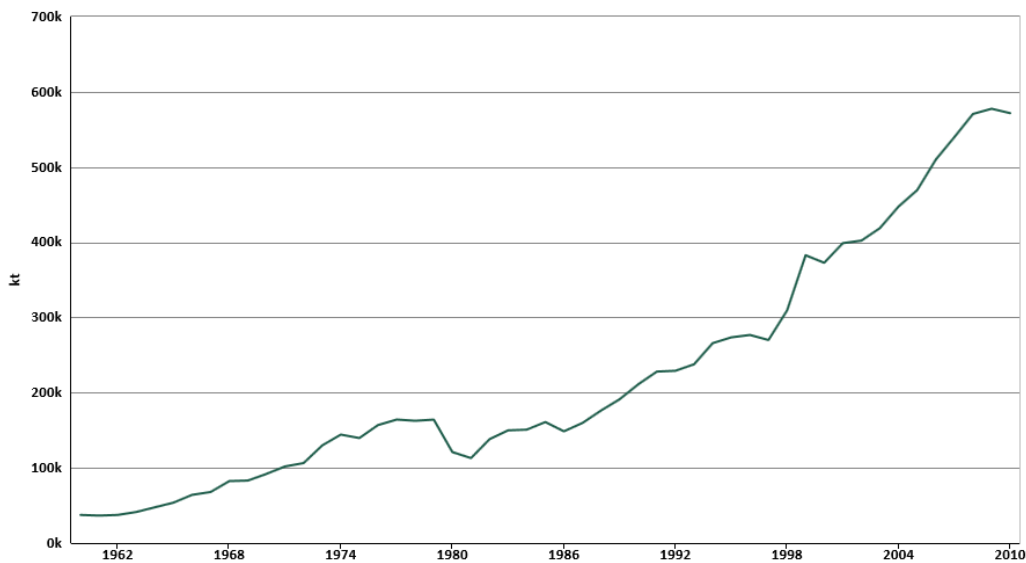
Development in bureaucracy has a direct relation with centralization. Bureaucracy during this decade has developed with the increase of state oil income. This process decreases the power of non-governmental sectors (Cottem, 1993: 388). This process led to the centralization of power in capital and the domination of Tehran on different aspects of social life (Zonis, 1992:132). Other administrations in other cities had low independency from the capital (Gasiorowski, 1992:328).

Another exploitation of the character of policy institution has also showed itself in limitation for independent parties. In this era we witness mono governmental parties and the limitation for press freedom. The lack of space for political independency in activity, much opposition tends to hide armed and guerrilla activities. For instance Muslim Nation parties began their activity in creating Khalgh began his attempt to create a socialist regime and the left party like Tofan which had the same goal in this area.

In sum through this period despite of increasing demand for participation the access to political opportunity was seriously limited. This situation influences in the social institutions like economy and led to a virtuous circle. This virtuous circle creates huge social un satisfaction and instability.

The Ecology

In this period there was not enough consideration towards environmental programs such as renovation and spreading the procedure of using natural resources. It was only in 1971 when preventing environmental acts took place in order to balance environmental matters. The amount of CO₂ gas produced by the fossil fuels is a suitable indicator of air pollution. According to the WDI census published in 2014 the amount of CO₂ gas in Iran can be followed from 1962 to 2010. In this period the amount of CO₂ gas from the fossil fuels increased 2 times from 82404 kt in 1968 to 164237 kt in 1977.



Iran - CO₂ emissions (kt)

Source: World Development Indicators (WDI), April 2014

There are many good results from forest destruction as criteria of natural resource destruction in many parts of Iran in three sectors, 1969, 1994 and 2007 in the census department. The formal published census shows the area of Iranian forests in north according to aerial photos in 1969, 1994 and 2007 and two years after in 2009, has decreased from 2 million 88 thousand hectares in 1969 to 4.7 percent and 7 percent decrease to one million 847 thousand hectares. All this is a sign of disregarding environmental issues in the developmental procedure as the only sustainable element in the contemporized society.

The Second era: First Developmental Programs from 1988 to 2003: from economical adjustments to political developments

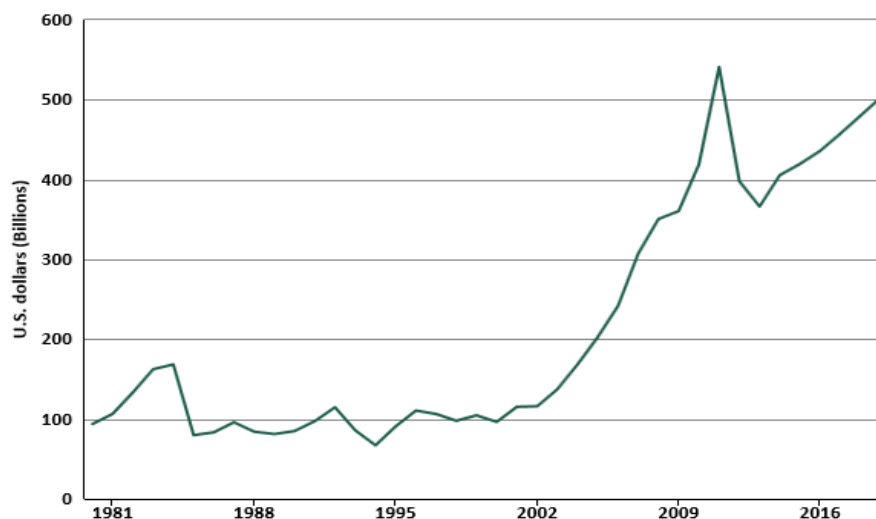
In the second era Iran achieved many experiences from the social revolution in order to put behind internal conflicts and the war. At that time the inclusive participation of the mass had changed the country to lifeless ruins. The second developmental program in 1988 according to the post war ruins was codificated and performed by the Hashemi Rafsanjani's government. The concern was mostly on economical realm renovation and development. In this era the economical adjustments policies was developed in 1990 which for its developers seems to create a more economical realm following political participation. According to the national accounts reports the program implementation during the first three years of the economical growth was respectively 5.5, 13.6 and 12.5 percent and in the last two years it has declined respectively with 4.7 and 1.8 percent. The first developmental program reached to an average annual growth of 7.3 percent yearly whereas the economical growth in its last year (1994) was reduced to 0.5 percent. The rate of Unemployment at the end of this era was 12 percent and its inflation was 35 percent. The GINI multiplier at the beginning of this period was 0.4 and at the end of the period 0.39. The end of this period was an introduction to the birth of an economical crisis which was followed by other crisis such as political and

ideological crisis. The second economical social and cultural developmental program in the Islamic Revolution was in order to fight against this crisis in one article and 101 notes in five years (1995-1999). The objective of the annual growth program was 5.1 percent and the total credits of the program were designated more than 238186 milliard Rials which ultimately reached to an average growth of 7.5 percent. This era started with one year delay in 1995 along with many economical problems. The inflation on this period was 49.4 percent and reduced to 20 percent in 1999. The annual average of growth domestic product was 3.26 and the GINI multiplier had no severe change, neither did unemployment.

In this era as a result of not considering political and cultural dimensions, contexts for political reform discourses were made whereas a new government based on this discourse was formed in 1997. The third economical, cultural and social developmental program was created in three parts, 26 chapters and 199 articles to be implemented during 5 years (1999-2004). Its total credits was estimated to 1388.5 milliard Rials and in the appendixes of the bills of the third economical developmental program the growth domestic product was 6 percent and 5.5 percent of it was realized. The average of investment growth in this period was 7.1 percent (the private sector 8.5 percent and the governmental sector 5 percent). The rate of Unemployment was reduced from 14.36 to 10 percent however inflation was increased from 12 percent to 15 percent in 2004. We see relative improvements in economical indicators (Varmarziar and Tehrani, 2010).

In an overall analysis we can say contemporary Iran has faced one of the most fundamental and structural changes. The first period was somehow a basis for the Iranian contemporary modernization in constructing modern economical institutions. The process of privatization, various investments in different eras, and the appearance of new jobs, the development of new services, financial speculation, the increase in the international role, the development of cultural invests and etc created the context of various new cultural stratum which were willing to participate in all social fields. Yet political institutions resisted intensively in absorbing this much participation leading to a new kind of modernism based on political development in the framework of a new government. These all provided the setting for wide spreading social and economical institutions in this era.

Overall the economical situation in this era is based on the GDP and its changes as economical growth indicators can be studied via the following table.

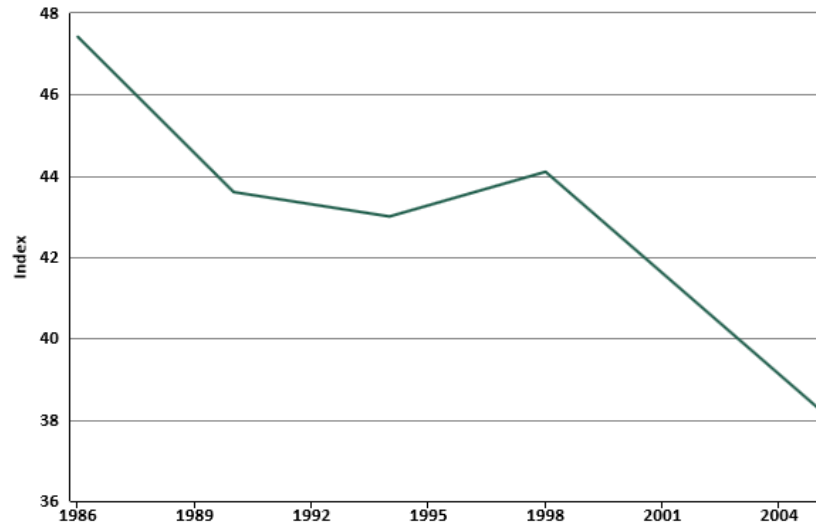


Iran - Gross domestic product,

Source: IMF World Economic Outlook, April 2014

The GDP was doubled from 81 milliard dollars in 1989 with a small amount of fluctuation to 161 milliard dollars in 2004 at the end of the third developmental program.

The GINI multiplier indicator as shown in the table below has had a severe decline which explains the wide spread of economical institutions in this era and it also reinforces the hypothesis of the evolution cycle.



Iran - GINI index, Source: World Development Indicators (WDI), April 2014

The Policy

After the Islamic Revolution the desire for participation and the institutional capacity for participation increased. The appearance for this issue was the number of institutions and governmental organizations which were chosen directly or indirectly by the election. Also the public participation has had a great significant change; this can be easily proven by the amount of participation in different elections. The census of participation especially for the president and parliament elections according to The Ministry of Interior is as follows:

- The Fifth Presidential election (July 1989), public participation 54.59 percent
- The Referendum Election of the Constitution Review (July 1989), public participation 54.51 percent
- The Fourth Islamic Parliament election (March 1992), public participation: 57.81 percent
- The Sixth Presidential election (March 1993), public participation 50.66 percent
- The Fifth Islamic Parliament (November 1995), public participation: 71.10 percent
- The Seventh Presidential election (June 1997), public participation 79.93 percent
- The First Islamic Council Election (November 1998), public participation 64.62 percent
- The Sixth Parliament Election (October 1999), public participation 67.35 percent
- The Eighth Presidential Election (June 2001), public participation 66.59 percent
- The Seventh Parliament Election (December 2003), public participation 51.21 percent

As you can see in the census, the political participation and the civilized society indicators at the end of this era was improved however after the 1998 parliament election the public participation declined. At this time freedom in public arenas was created for people, newspapers had more independence, the publication of compiling books and translated books increased to a great amount. The cultural consumption of modernism along with the modernization of cultural traditional commodities deployed, the number of nongovernmental institutions had a significant growth, modern stratum of intellectuals were able to impose their discourse in various sectors and the importance and consideration of the law increased more than before. This procedure provided a new modern experience for the Iranian man along with economical changes.

The Ecology

Environment in this time became significant in sustainable issues. Yet at first due to heavy investments in infrastructure such as communication infrastructures, ports, different dams, heavy industries, raising mineral and oil resources and etc caused many problems for the environment. Many jungles in the north in Iran were destroyed. According to the latest studies in 2006 the area of grassland in the country has been announced 84.7 million hectares. The grassland area before the Revolution was 90 million hectares including 14 million hectares (15.55 percent) with good vegetation, 60 million hectares with intermediate vegetation (66.67 percent) and 16 million hectares vegetation with poor or really poor (17.78 percent). In 2006 the vastness of the dense grassland in the country was 7.18 million hectares (8.5 percent), the semi dense were 21.14 million hectares (25.3 percent) and the low dense were 56.15 million hectares (66.2 percent). Based on the above announcements there was a decrease in the country's grassland and its density due to the pressure of animals dependent to grassland, grassland's change of function to other functions such as agriculture, urban development and neglecting resource policies. Yet in this period many institutions who were supporters of the environment became active which is a sign of the significance of environmental issue (The Iranian organization of Environmental Protection and The Iranian Census Center).

According to studies conducted in 2006, the total area of rangelands estimated 84/7 million hectares. Pastures level of Iran before the Islamic revolution (1978) was 90 million hectares. So we can say that in this period the total amount of available pasture declined. Reduction of rangeland in this period can be verified to factors such as: Beneficiary population pressure, Pasture-based livestock population pressure, Change to other land uses such as agriculture, pasture, urban development and divesting, Non-professional and scientific policy-making and resource allocation (ibid).

Dryness and the lack of water, air pollution in big cities and also dust storms were some of the most important environmental issues. The CO₂ produce based on the chart varied from 141344 kt in 1989 to 447444 in 2004 showing a huge growth and indicating the city pollution.

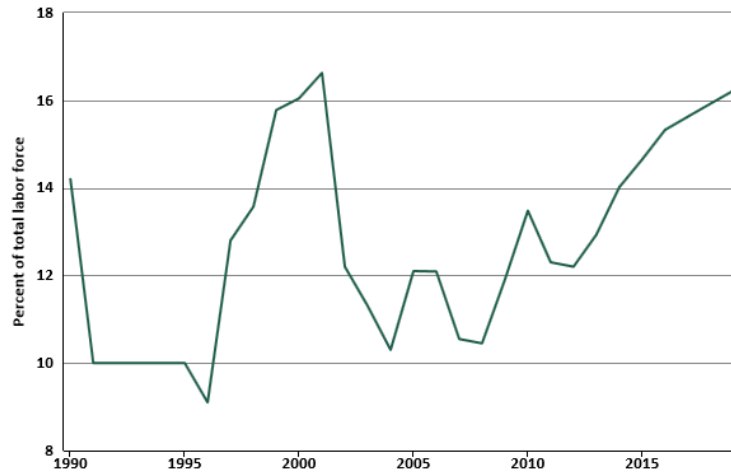
The Third Era: from 2005 to 2011: the Illusion of Return

The Economy

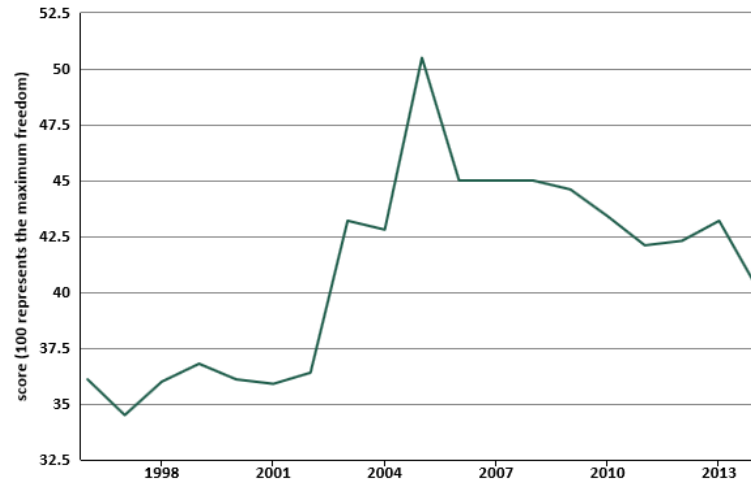
After the reformist state, the social forces that were affected from the new arrangements and had cultural critics were able to gain political power. After the presidential election although the Forth Developmental Program was approved in the parliament, but new states ignored it completely. Moreover the new state moved on with the breakup of planning organizations such as the planning and management organization which moved the atmosphere towards the non transparency of policy and economy. This breakup had an important role in decreasing the transparency and disorderly in the distribution of economical resources. Some hidden groups however benefitted from this situation. In this situation the inclusiveness of institutions was going to decrease and the distribution of mechanism of resources was limited and unclear. During this era many economical indexes failed against noticeable increases in oil income in the country (Corruption Perceptions Rank, 2013).

The growth of gross national production in 2005 came to negative at the end of this period from a seven percent rate. The growth in investment declined. According to central census department in Iran at the beginning of Ahmadinejad's presidential period in 2005 the employed population in the country reached to 20 million and 618 thousand and 579 people and at the end of 2012 this number reached to 21 million and 160 thousand and 887 people. This rate indicates that during this period of about 8 years only 542 thousand and 308 people were added to the employed population of the country (Central Iranian Bank).

The GDP according to the shown chart in 2005 has been 84 milliard dollars and until 2011 it reached an unbelievable number of 541 milliard dollars and after this time it decreased. In this era especially after 2010 and 2011 the fusion and inequality increased and as seen in the census the economical situation became worse. The chart below is an example of this issue shoeing the rate of unemployment.



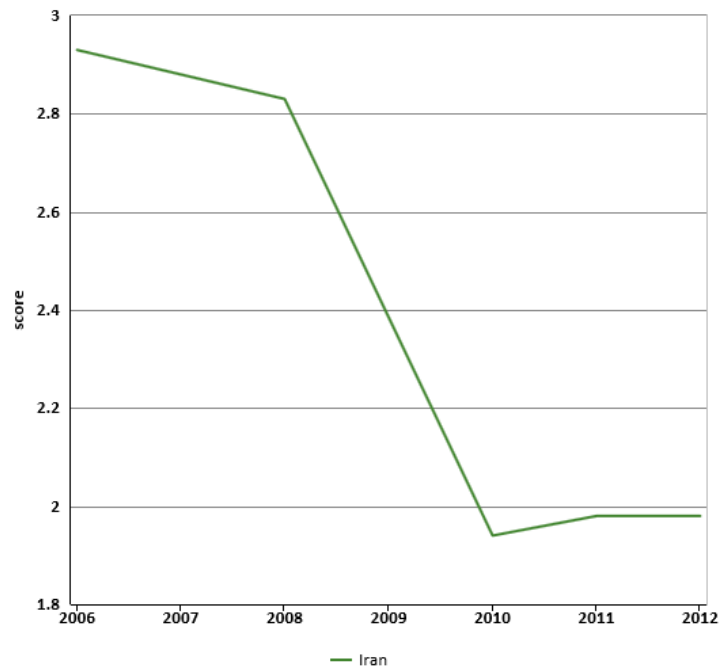
Iran - Unemployment rate, Source: IMF World Economic Outlook, April 2014



Iran - Index of economic freedom, Overall Score, Source: Index of economic freedom, 2014

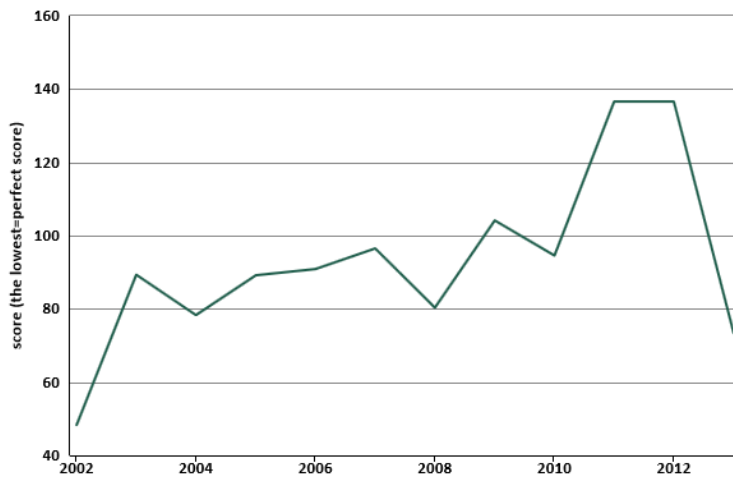
The Policy

During this period policy institution moved to particularity. Based on democracy index that is presented annually by Economist shows that trend in policy institution in this period is not ascending. The Criteria of democracy is derived from annual research in information unit of Economist about the situation of democracy in 167 countries. This criterion is built from the sum of five indexes including the process of election, pluralism, civil freedom, political participation and political culture. This list was issued in 2006 and then updated in 2008, 2010, 2011 and 2012. As it is clear on the chart below through these years the trend is not positive.



Iran-Democracy index 2012, Source: Economist Intelligence Unit

The Press's Freedom index shows the disorderly trend through this era.



Iran - Press Freedom Index, Source: World Press Freedom Index, 2013

The Ecology

This era sees inconsideration in using underground sources and forests either by private sectors or industrials. The amount of CO₂ increases to 469000kt at this time. The witness for this issue is the severe air pollution causing

problems for people in big cities. The research in medical science university also shows that 35 percent of children in Tehran have allergies. The results also indicate lower IQ in children especially in more polluted areas.

Formal census states the area of forests after 1978 has strongly declined. This trend suddenly changes in the 1990s. According to the yearly World Bank report which became popular in 2005, yearly an amount of 125 thousand hectares of Iranian forests are destroyed. It is predicted that in the next 50 years there will be no forest left in Iran. This has also occurred for the natural grassland and the erosion of soil in Iran.

According to the Iranian census department, Meadows area of Iran in 2012 have been estimated more than 84 million 800 thousand hectares. However, base on The Iranian organization of Environmental Protection in 2005, every year 800 thousand hectares of rangelands area is reduced. According to this report, during 1986 and 2012 more than 17 thousand and 780 cases of intentional and unintentional fires in forests and rangelands have been recorded. Burnt forest and pasture lands, was more than 230 thousand hectares. The approximate amount of soil erosion in Iran is yearly 22 to 33 tons per acre for this period. Direct costs of soil erosion in 2000-2012 was about 2,259 million dollars in every year. This trend, not only reduce the fertility of land, will also be added desert area in contemporary environmental of Iran (Retrieve from Khosravi Fard, 2014).

Conclusion

If we look at the last five decades of Iran from a sustainable development aspect, it seems that we should divide this time to at least three sections, not considering the ten years after the revolution when the country encountered serious problems like war and instability situation.

In every period, the relation between essential social institutions was different and particular, especially between policy, economy and ecology. These different institutional relations create different consequences for Iran's development.

Iran's development in every period was an interaction between main institutions like policy and economy. In each of these three eras there were different circles between institutions, which create stability or instability in society and different interactions with ecology. In the decade before the revolution, economical institutions passed noticeable growth for increasing state investments. But political institutions moved to increasing absolutism.

As result distribution of resources and access to economical resources in economical institution was limited by elites who had political power. In this period, environment began destroying in the limit absolutism: Political institutions concentrated on power in the hands of a few, without constraints, checks and balances or rule of law. In this era, despite of noticeable growth was created a vicious circle. This vicious circle leads less participation and political institutions concentrating power in the hands of a few, without constraints. This situation created a circle between social institution that led to a waste in social in-satisfaction and instability. The Revolution was derived from this circumstance.

At the first decade after the revolution, Iran was involved to a set of political contradiction during the first years, and then the country encounter a huge war that was imposed by Iraq and Sadam. After the war, the two presidents of Iran passed similar policies about development, although we can recognize some differences between them but we can show much continuity between them that suppose our typology. This circle was continued through sixteen years.

During the first eight years, economical development and through the second eight years political developments were more considered. Through the first eight years the society relatively moved to Secure property rights, law and order, markets and state support (public services and regulation) for markets; open to relatively free entry of new businesses; uphold contracts; access to education and opportunity for the great majority of citizens, But some degree of political centralization for the states were also able to effectively enforce law and order

During the second eight years, society moved to inclusive political institutions. At this time political institutions allowed broad participation placing constraints and checks on politicians. Inclusive economical and political institutions create powerful forces towards economic growth by encouraging investment, because of well-enforced property rights. This time created a good opportunity for generating broad-based participation in education, again free entry, and broad-based property rights.

In the third period that began by president Ahmadinejad, we can see a shift in approach to development. Ahmadinejad's state took different stand to development. Through this time with an increase in oil income of state, the amount of money injected to Iranian economy was declined. Despite noticeable increase in state investment, finally economical situation went to a noticeable wane.

Some criteria like economical transparency, economical corruption, and etc. show that economy moved to extractive economic institution. Also in policy institution we can see similar trend. In result, a circle was shaped that we cannot recognize as a virtuous circle. In ecology also country encounter with a crisis situation. In sum, it seems that we cannot describe the last five decade of Iran as a continuous way with a signal circle between social institutions. It is better to divide it into three different circles. In every circle the interaction and relations between economy, policy and ecology has different. Development of Iran has shifted between these three circles. From the past one year Iran again had witness to a shift. Iran once again shifted to a second type of approach in development.

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