The Employment of Integrative Approach to Measure the Consequences of Adoption of Technology and Industry into Kurdish Speaking Areas in Western Azerbaijan Province in Iran

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ABSTRACT— *The present study aims to investigate possible consequences of introduction of technology and industry into Kurdish areas in Iran. The data were collected through core groups, in-depth interviews, oral history, and questionnaires. The sampling procedure was Parallel Mixed Sampling Method (Quantitative Likelihood Sampling and Qualitative Purposive Sampling). The research methodology was a combination of sequential-explanatory methods. Furthermore, the data were collected through a cross-combination method. A model was developed based on grounded theory to estimate the consequences of the introduction of technology into traditional societies whose basic assumption is "aborted development". The reason behind introduction of technology into Kurdish traditional society is associated with some factors such as the attention of private and cooperative sectors to industry and early output enterprises. Interactional conditions include the two dimensions of ignorance and apathy and success and acceptance. On the other hand, consequential dimensions include modern, developmental, rational, and traditional values. The results of logistic regression test indicate that the industrial sector is more likely to accept value-normative changes. The findings of the second logistic regression Test suggest that gender differences will result in differences in the acceptance of value-normative changes for males and females. The important point in the third model is that the place of origin cannot be considered as the only factor affecting value-normative changes as in the third model the possible differences between industrial and non-industrial sectors with regard to the possibility of acceptance of value changes have been discarded due to controlling socio-demographic characteristics*.

Keywords— Mixed method, Aborted Development, Technology, Traditional Societies, Traditional and Modern Values, Kurdish Speaking Areas, Southern Regions of Western Azerbaijan Province

1. INTRODUCTION AND STATEMENT OF THE PROBLEM

The development of social progress and its speed depends on many factors, one of which is technology. Some believe that technological breakthroughs changes many aspects of our everyday life. Modernization theorists from Marx and Weber to Bell and Toffler have suggested that the emergence of industrialized societies is associated with consistent cultural changes in the system of traditional values. The common feature among most theorists in social, political, and cultural fields is that they thought the entrance of technology into traditional societies brings about substantial changes in people's attitudes and values. However, attitudes towards the introduction of technology and value-normative changes were not the same in other approaches. Some of the scholars such as Huntington (1996), Putnam (1993), and Fukuyama (1995) point out those cultural traditions are significantly stable and form socioeconomic behaviors in today's societies. Another school of thought underlines the stability of traditional values despite social and economic changes. In this school, it is assumed that values are relatively independent from economic conditions (e.g. DiMaggio, 1994). Consequently, traditional values continue to influence independently cultural changes created by economic developments (Englehart &Welzel, 1989: 44). In addition to addressing these changes, the present study tries to find out which aspects of value and cultural systems of people under study in Kurdish speaking area in Western Azerbaijan Province have remained unchanged and stable.

The dominant argument in the field of development is that in order to meet the needs of the growing populations there is no choice but to resort to technology and industry. In addition, the use of new technology and establishment of factories will improve the conditions of people's lives and they can manage their affairs more efficiently. For instance, a housewife who has a washing machine will enjoy a better and more comfortable life than the one with no washing machine." The argument even goes further and regards technology as the basis for the cultural development of communities: "The cultural development is determined based on human needs, providing goods and services per capital based on the amount of energy absorbed per capita and the efficiency of the technology tools by which the energy will be used."

As was mentioned, the main objective of the present study is to investigate the consequences of entrance of technology and industry into Kurdish speaking areas in Iran. Therefore, the main hypothesis of the study is that entrance of technology into traditional societies has contradictory consequences. As a result, when discussing the entrance of technology it is needed to consider stable and variable aspects of culture.. In this study, the focus is given these changes simultaneously and local culture is considered briefly since most people and professional observe these changes while a part of traditional local culture is present at the time of industrialization process in the society and continue its life and serves as a stimulus to inspire progress and development.

Finally, all modernization theorists consider the culture of developing societies as an obstacle to achievement of progress and development. Based on the pre-assumption, they argue that in order to reach a desired situation, it is necessary to abandon traditions. They believe that the entrance of technology in to the society will result in iconoclasm or elimination of traditions. The present study reviews and challenges this approach and in line with UNESCO's approach suggests that culture and tradition in a developing society acts as a basis for the development of that society. In addition, the universal approach proposed is not successful but also cannot stand against local cultures. The population under study includes Kurdish speaking areas in the southern parts of Western Azerbaijan Province in Iran. These areas are experiencing early stages of industrialization and a strong tradition and culture is dominant in areas under investigation. However, a type of traditional-craftsmanship culture has been formed in this part of the country.

2. MAIN STREAM APPROACHES IN SOCIOLOGY OF TECHNOLOGY

Main stream approaches in the sociology of technology can be divided into three categories. The first category includes those theories the can be somehow seen as a part of technological determinism. The second category comprises theories belong to an approach under social shaping of technology. And finally the third category includes those theories that have a synthetic nature, emphasizing the interaction or interdependence of technology and society.

The first category, technological determinism, does not deal with technological ontology. In this category technology is not seen explicitly or implicitly as having an autonomous sphere or possessing a type of internal logic and mechanism to move forward. As a result, technology does not develop under the influence of external and social parameters. On the other hand, theories in this category are focusing on social effects of technology. In other words, social developments (including, economic, cultural, and social changes) will happen as a result of technological changes.

The second category focuses on theories of sociology of technology and the effects of social parameters on the formation of different technologies, their development, and their application as well. Two main approaches contained in this category are a) those approaches dealing with different social parameters in the formation and development of technology and b) those focusing on effects, results, and consequences of technology on the society and on different sectors, relations, institutions, and structures within the society (Tavakol, 2011: 28).

Finally, the third category includes those theories related to sociology of technology that try to reduce or compromise dualisms, conflicts, or tensions between the society and technology. Two main theories in this category are Actor Network Theory (actors' theory) and combined theories introduced by some scholars such as Donna Haraway.

3. THE THEORETICAL AND CONCEPTUAL FRAMEWORK OF THE STUDY

As mentioned above, of the three main approaches in the field of sociology of technology, the theory of technological determinism assumes social changes in the aftermath of technological changes. White is one of the theorists of technological determinism who has proposed four categories for culture: technological category, sociological category, ideological category, and sentimental or attitudinal category (Moore, 2009: 183-184). According to White, technological system is a fundamental aspect of the society. Social systems are dominated by technologies and philosophical systems reflect technological forces and social systems. As a result, technology acts as a determining factor in a cultural system as a whole.

The second approach focuses on the interaction or interrelationship between technology and society. Foster is one of the theorists in this field who is interested in "the study of the role of human factors in technological changes or in social aspects of technological development affecting changes within traditional societies" (Foster, 1999: 9-10).

Finally, the third approach focusing on theories related to the sociology of technology deals with the presence of social parameters in the formation and development of technology. This approach is divided further into two categories. The first category focuses on effects, results, and consequences of technology in the society. Theorists such as Inglehart and Welzel, Inkels, Hersey, Blanchard, Hobsbawm, and Dunmade have taken this approach. Inglehart discusses value changes in industrialized and post-industrialized societies. Like Inglehart and Welzel, Inkels and Smith have considered the effects of industry on changes and attitudes in the society. Hersey and Blanchard have discussed the level of changes occurred. The simples change is creating a change in knowledge and vision. Then, change in attitudes follow it. Hobsbawm is another theorist who is interested in the role of industry and industrial revolution in creating a fundamental

social change.

Based on what was mentioned, the approach taken by the present study has more affinity with Hobsbawm and Dunmade's work since this study deals with the consequences of entrance of technology in a given society and its stability. Hobsbawm believes inadaptability to new conditions is the reason behind the decline of the industrial system. Accordingly, to evaluate the success or failure of entrance of technology into a developing economy, attention must be paid to adaptability issue which can be assessed at four technological, environmental, economic, and sociopolitical levels. Likewise, the entrance of technology and its adaptability and consequences in the Kurdistan is of high importance in the present study. The only difference is that the present study focuses on social and environmental dimensions. In addition, in Hobsbawm and Dunmade's study the sample under study included a society as a whole, while in the present study a central portion of an ethnical and religious minority has been examined in a developing economy.

4.   RESEARCH METHODOLOGY

The data were collected through a cross-combination (intra and inter combined) method in the present study. The inter-combined method refers to the simultaneous or subsequent use of several different qualitative or quantitative methods. The population under study included all   individuals working in factories in Piranshaher and Mahabad (two cities in Western Azerbaijan Province, Iran) as well as all residents of these two cities. The reason behind the selection of these cities is that some factories such as Mahabad Agro-industrial Complex and Piranshahr Sugar Factory have been working over 40 years which are considered useful in investigating cultural changes or cultural continuity. In order to collect the required data, a number of qualitative methods, oral history techniques, in-depth interviews, and core groups were employed. In addition, 401 researcher-made questionnaires were distributed and filled in two industrial and non-industrial sectors in Piranshar and Mahabad. In the qualitative part of the study, seven core groups were investigated in the industrial sector. The sample for industrial sector included MahabadMomtaz Electric Industries (producing electric switches, plugs, home and industrial electrometers parts), MiladMahabad Livestock and Poultry Plant, Mahabad Sugar Factory, Piranshahar Alcohol Plant, Mahabad Agro-industrial Complex, Mahabad Chicken Incorporation, Mahabad Sheller Food Industries. Besides, 44 in-depth interviews were administered to the participants in the industrial sector. Finally, simple and marginal workers were participated in the study through oral history technique.

The sampling procedure used in the mixed method in this study was Parallel Mixed Sampling Method (Quantitative Likelihood Sampling and Qualitative Purposive Sampling). Parallel Mixed Sampling is a strategy in which likelihood sampling techniques are used to collect data in a quantitative manner. On the other hand, purposive sampling techniques are used to collect qualitative data. Theoretical sampling indicates that the data collection method is based on a given theory in which the researcher collects, encodes, and analyzes the data and then decides how and where to collect data subsequently. In qualitative studies, the researcher classifies the data in order to extract the existing patterns and models. Similarly, in the present study, the basic concept of aborted development was extracted after open, pivotal, and optional encoding. Mixed analytical methods are used to analyze the data collected through mixed methods. In the present study, grounded theory was employed to analyze the qualitative data and SPSS Software (version 16) was used to analyze the quantitative data. To analyze the qualitative data, grounded theory was used to extract concepts, subcategories, and basic categories. Grounded theory is a relatively new approach defined in innovative research as "discovery of theories from the data". Grounded theory research begins with focusing on a field of study and collects the data from different sources such as interviews and field observations. Once the data are collected, they are analyzed through theoretical encoding and sampling techniques.

5.   RELIABILITY AND VALIDITY OF THE INSTRUMENTS

Table 1: Cronbach's alpha for items used to measure value-normative changes

Index	Cronbachs alpha	Cronbachs alpha based on standardized items	Number of items
Value-normative changes	0.909	0.917	50

The triangulation method was used to validate the qualitative data and construct validity and Cronbachs alpha techniques were employed to validate the quantitative data that are the most important and the most widely used techniques in SPSS to measure the reliability of instruments used to collect the data. When the value of Cronbachs alpha is higher than 0.90 the reliability of the instrument is desirable and show the high reliability of the results obtained. In the

present study, the reliability of the instrument was greater than 0.90, indicating that items had a higher internal consistency and the results obtained through the study are considerably dependable.

To measure the validity and the reliability of qualitative instruments in the present study, triangulation method was employed which included three angles or evaluation sources. In other words, triangulation is one of the most popular validation approaches in qualitative studies, indicating a convergence based on special findings using a variety of techniques, theories, approaches, researchers, and informational resources.

6. FINDINGS OF THE STUDY

Bivariate analysis of data shows significant differences in value-normative changes for different regions. These differences were related to attitudes towards time, jobs, level of education, rationality, religion, women's rights, meritocracy, and so on. Logistic regression test was used to find out whether the observed differences are arising from social-demographic changes in the sample under study or such differences are caused by other factors. In other words, to investigate the simultaneous effects of independent variables on dependent variables (the level of value-normative changes), multivariate logistic regression test was employed since the dependent variable is a nominal bivariate variable. In fact, such analysis aims to find how value-normative dimensions will be changed based on different categories of independent variables.

In the first model, location was added to the analysis as a variable and, as can be seen, the values of this variable are statistically significant in relation to the dependent variable. To be located in two different places will change the possibility of adoption of value-normative changes. In other words, if the significance value for people working in non-industrial system is equal to 1 the same value for individuals who are located in industrial sector is 2.5 times greater i.e. its value is 2.482, suggesting that the possibility of accepting value-normative changes is much higher in industrial sector than in nonindustrial sector. The accuracy/validity of this model is 71.3% and the value of chi-square is valid and significant at 99% level of significance.

In the second model, in addition to place, demographic variables such as the respondents' gender and age have been included into the analysis. The results obtained through this model indicate that controlling demographic characteristics can mediate the possibility of accepting value-normative changes in industrial and nonindustrial sectors. The accuracy of the model is 71.3% and the value of chi-square is valid and significant at 99% level of significance.

Table 2: Predicting the possibility of value- normative changes using logistic regression model

Independent variables	Categories	Model 1		Model 2		Model 3	
		Sig.	Sig.	Sig.	Ex (B)	Sig.	Ex (B)
Location	Nonindustrial sector (reference) Industrial sector	*	2.482	*	1.920	ns	0.997
Gender	Male (reference) Female			*	0.375	*	0.368
Age	Less than 25 years (reference) 33 to 26 years 42 to 34 years 50 to 43 years 51 years old or higher			ns * * *	0.885 0.532 0.313 0.311	ns ns * *	0.673 0.410 0.214 0.178
Level of education	Illiterate (reference) Primary school Guidance school High school Diploma Associate Degree B.A and higher					ns ns * * *	1.040 1.234 1.546 1.789 2.124
Job	Unemployed (reference) Simple workers Sales and services employees Supervisors Directors					ns ns * *	1.004 1.275 1.672 1.865

Income	No income (reference) Under 250 $ 350 to 251 $ 450 to 351 $ 550 to 451 $ 551000 $ or higher					ns ns ns ns *	0.995 1.121 1.452 1.547 1.763
Constant		*	0.909	*	2.479	*	2.923
Validity/accuracy							
chi-square		*	469/7	*	143/13	*	728/12
2-log likelihood		476.069		455.457		443.129	
Nagelkerk R Square		0.000		0.072		0.114	

* = Significance at the level of 0.05 ** = significance at 0.02   ns = non-significant

In the third model, in addition to demographic variables, location and other socio- economic factors - such as level of education, job and income were included into the model evaluate the simultaneous effects of other independent variables on the dependent variable. The results gained through this model are remarkable. As can be seen, the accuracy of this model is 72% and the value of chi-square is significant at 5% level of significance. The results of the model confirm the results obtained for gender and higher-age groups in the second model. In other words, with respect to existing significance levels; women who are 40 years old or higher are less likely to accept the value changes. In this model, level of education is considered as an important variable and except for primary and guidance school, other educational levels are able to predict the probability of acceptance of the normative changes by the population under study. In other words, a change from guidance school to high school, associate and bachelor degrees or higher will result in an increase in the likelihood of accepting value-normative changes. Among people with different jobs, supervisors and top managers are more likely than people with other jobs to accept such changes. Although the income is not an important predicator of the dependent variable, but those who earn 5500000 Rials or more per month are more likely to accept value-normative changes then people with other income levels. A point worthy of attention in this model is that the place of origin in industrial and nonindustrial sectors cannot alone be an influential factor to create value-normative changes because, as can be observed in the third model, controlling other demographic and social characteristics such as gender, age, occupation and, in particular, educational level, the difference between industrial and nonindustrial sectors with regard to the probability of accepting value changes will be diminished and is   statistically insignificant. Accordingly, social factors, such as level of education, traditions, and norms will affect the transfer of technology and confirms the main claim made in the present study i.e. social factors play a vital role in acquisition, acceptance, and the success of the technology. An emphasis on traditions, values, and norms (i.e. the stable parts of a culture) in acceptance of technology is more evident in the qualitative findings which are going to be discussed in the following sections.

7.   EXTRACTION OF CONCEPTS, SUB-CATEGORIES, THE CORE CATEGORIES BASED ON GROUNDED THEORY

Table 3: Number of concepts, sub-categories, and the core categories observed in the study

| No.	Frequency of concepts	Sub-categories	Core categories
1	52	8	Modern values
2	47	4	developmental values
3	52	4	Ethical values
4	45	5	Rational values
5		1	Equalitarian values
6		6	Traditional values

The core category of "modern values" consists of 52 concepts and subcategories of "hard working, anticipating the future, work culture, self-esteem, life expectancy, positive attitude towards life, the power of goal setting and innovative thinking. The core category of "ethical values" covers moralization, work ethics, competition, and meritocracy. The core category of "pro-development values" consists of development culture, participation, interaction, and staff orientation. The core category of "rational values" includes 45 concepts and sub-categories of rationalism, belief in education and expertise, intellectualism, and empiricism. The core category of egalitarian values is made of 10 concepts and one subcategory positive attitude to women's rights. And finally, the core category of "traditional values" covers 42 concepts and subcategory such as God-centeredness, religious fundamentalism, abstinence-orientation, belief in revelation, and traditionalism. Consequently, the core category of "aborted development" has been extracted and proposed in the present study using these conceptual dimensions, concepts, and subcategories.

8.   DISCUSSION AND CONCLUSION: THE CONSEQUENCES OF ENTRANCE OF TECHNOLOGY INTO TRADITIONAL SOCIETIES AS "ABORTED DEVELOPMENT"

Based on the conceptual dimensions, concepts, and subcategories proposed, it can be said that the core category in the present study is "aborted development" which covers all concepts, subcategories, and core categories suggested through this study. The concept of "aborted development" is demonstrated in the form of a model which consists of context, the entrance of a phenomenon, and consequential dimensions. "Aborted development" differs from uneven regional development in economics which shows the development of a region over another region or area. Here, aborted development implies that inattention to environmental issues will result in aborted development. For instance, although the industrial sector has made considerable progress in Kurdistan, this development has been blurred due to the lack of a culture for preserving the nature and detrimental effects of industry. Development and progress is a complicated, comprehensive, and multidimensional issue whose realization is in the need of maintaining some traditional elements and changing some other elements. Accordingly, the main question is that which elements of a local culture remain unchanged and stable and which elements undergo changes in the process of introducing new elements into that culture.

A model was proposed in the study based on the grounded theory showing the presence of elements of local culture juxtaposed by new elements. However, the introduction of technology and industry is unrelated to other sectors in the society and may have risky consequences for the nature. As a result, based on concepts and theories proposed here, "aborted development" model was suggested which connotes a type of development which is uncompleted and brings about a deficient offspring (Sharafkandi, 2005: 447). Therefore, the conditions under which the technology enters a traditional society, its interactional conditions, dimensions, and consequences are of high importance. The proposed mold has been extracted based on interviews with the participants and core groups.

Model 1: Consequences of entrance of technology into traditional societies as "aborted development"
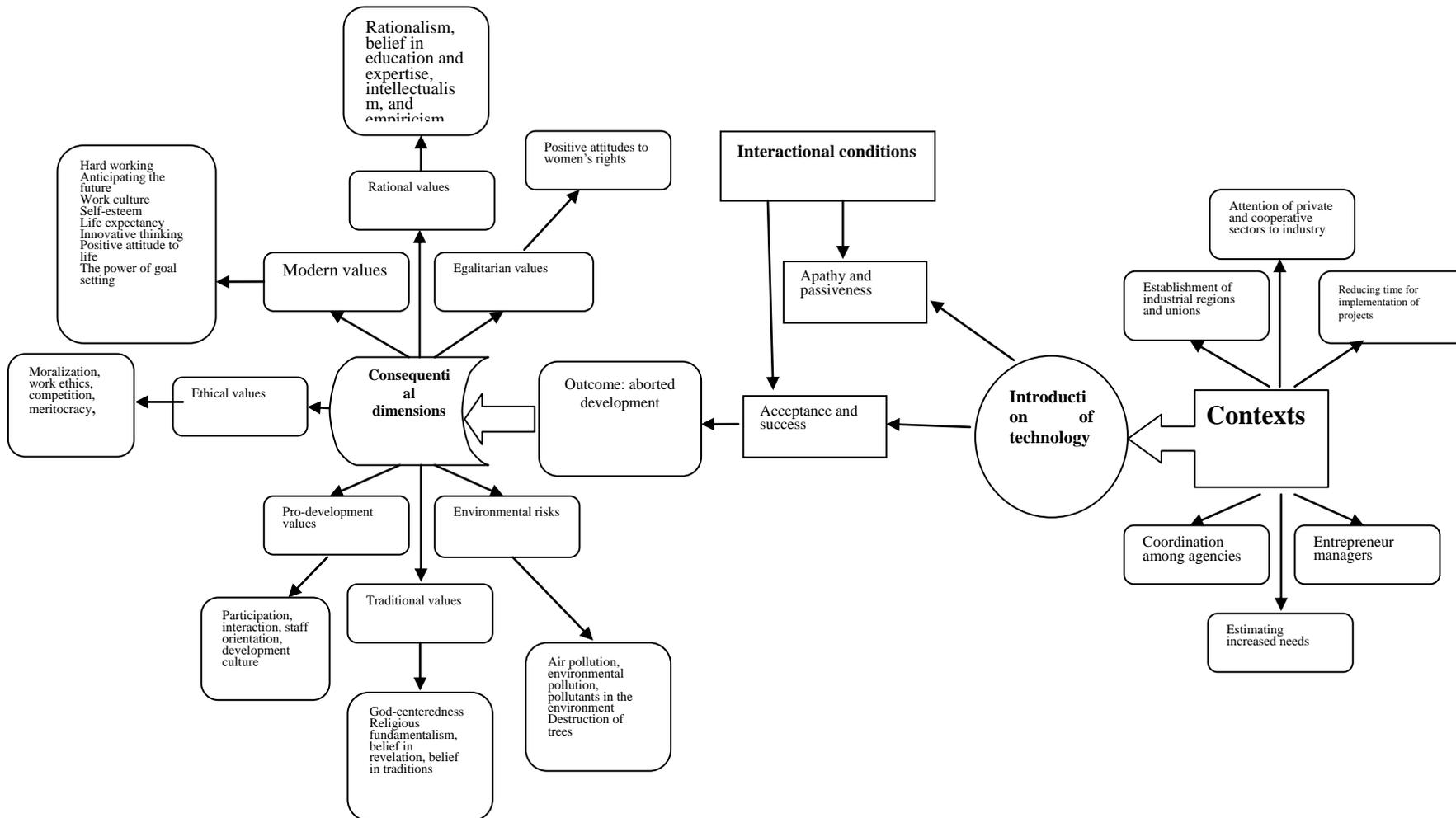
There are a number of reasons behind the entrance of technology into Kurdistan, of which seven factors will be reviewed in the present study. However, it should be noted that other factors may have affected the entrance of technology into the region under study and perhaps one of the main factor is the security. Such issues have not been considered by the present study and since the introduction of technology may be interrelated with many factors they can be investigated in another study.

After the 1978 Islamic Revolution, industrialization in Kurdistan did not go through much development. However, after the revolution given the increasing needs of the society and the tendency of the private sector for the employment of new technology the pave was made for the private sector to revive traditional technology at various stages, to introduce new technologies, and to establish various industrial regions and industrial organizations. In addition, the use of technology by the government departments resulted in the time needed to implement different projects. The presence of efficient and entrepreneur mangers in the private sector was another reason to accelerate the entrance of technology into the region and to achieve a number of success in the field of new technologies such as MahabadMomtaz Electric Industries, MahabadAgroindustrial Complex, Mahabad Chicken Incorporation, and Mahabad Sheller Food Industries. As result, to satisfy increasing needs the populations, and the transcendental position of factories and industries among investors the adoption of new technologies was widely welcome by the Kurdish speaking areas. In other words, the needs of traditional societies to the entrance of new technologies lead to the adoption of such technologies. However, the adoption of new technologies took place at different rates in various periods. The highest level of industrial growth was observed during the last five years due to considerable facilities and funds granted by the government to the private sector under the name of "early output enterprises". Besides, the private and cooperative sectors had an active participation in industrial and mining operations so that most firms under study have been among exporters of industrial products and not only have satisfied the needs of the domestic market but also have exported a part of their products.

Another aspect of the model is interactional conditions which are related to the type of reaction of the Kurdish society to the adoption of new technology into the region. Two types of reactions are assessable with regard to new technologies. On one hand, because of sectorial development of technology and its detachment from the society, many people are unaware of different industries and technologies employed in the region, indicating that the first reaction showed by people is a state of unawareness, indifference, and passiveness towards new technologies. The complaints expressed by many factory managers are originating from this problem. For instance a majority of villagers in Gogtapeh (a village) do not know Mahabad Electric Switches Factory, located two kilometers far away from the village, was closed several years ago and was replaced by another factory (Momtaz Electric Industries). In cases when Mahabad Electric Swithes Factory needed the help from the public sector it did not received any type of assistance and most rich people did not welcome the factory due to profitability reasons. This means that the industrial sector has not been able to fulfill the needed function at a large scale as was expected. In other words, the industrial has remained limited and inefficient. For instance, the West Azerbaijan a mainly Kurdish region has not experienced the logical process of industrialization. A reason is that the needed conditions for production were not met with the use of accessible resources in the region. Beside, the raw materials needed are not provided domestically and are prepared through importation. Furthermore, the main agricultural products are produced traditionally and there is no logical support to mechanize the agriculture sector. To make the matter worse, the negative effects of industrialization can be seen in the region. The second reaction is related to the acceptance of new technology that had perceived consequences for those people who are related to industry and the industry has become an integrated part of their life. These consequences will be discussed in the following sections. The main argument is that the arrival of technological innovations will face some reactions with regard to the conditions discussed. This means that both reactions and interactional conditions will have two forms. On one hand, such technologies have not covered a majority of people and have remained at a limited scale. On the other hand, they have limited consequences for the staff working in factories which have been shown under consequential dimensions in the model proposed in the study. In other words, these dimensions have been included into the model to explain the consequences of the adoption of technology on the factory workers and, therefore, they are not generalizable to the whole population in the region.

As mentioned previously, consequential dimensions of the adoption of technology by traditional societies have been divided into seven groups which show traditional and modern values are juxtaposed. One of these dimensions is modern values which are composed of 7 subcategories. Accordingly, the entrance of technology into the Kurdistan society has promoted "modern values" such as hard working, work ethics, self-esteem, anticipating the future, life expectancy, positive attitudes toward life, and power of goal setting. The entrance of a modern phenomenon into traditional societies brings about modern values which are realized for people who are dealing with technology every day based on their interaction within the industry. This finding was evident in the quantitative data showing that there was a significant different in the attitudes of those who were dealing with industrial sector and the attitudes of those who were less associated with industry. To be placed in the two industrial and nonindustrial sectors will change the possibility of accepting value-normative changes, i.e. the possibility of accepting such changes is higher in the industrial sector than in nonindustrial sector. For instance, the more people are dealing with industrial sector the more attention they will pay to the importance of time. Contrary to a belief based on which in traditional culture pay little attention to time and the future and that in the culture of developing societies more attention is given to the past times, the findings of the study indicated

that for the participants in the study the present and the future were of great importance. For instance, one of the participants of the industrial system says "The near future is more important to me. Let's bygones be bygones, whether good or bad it must be forgotten. The present time can be the near future for me as it is somehow predictable and programmable. Regretting the past is of no use but to waste today's energy and to spoil the present time. The past can be used as a source of energy for the time being".

Another consequential dimension of adopting new technologies is "pro-development values". The adoption of industrial technology by the Kurdish speaking society has promoted pro-development values such as development culture, participation culture, interaction, and staff orientation. As a result, the participation of all employees and appropriate social interaction among personnel and customers are of high significance. If a firm is not able to define the relationships between the staff and consumers appropriately the firm will be less likely to succeed. On the contrary, in all successful firms, managers and directors have good relationships with their employees and customers and satisfy their needs and thus works are done logically and efficiently. For instance, one of the participants in the study pointed pit "Experience plays an important role in the success of the firm. Most important are working relationships which get the works done successfully. For example, in Mahabad Chicken Incorporation good relations are very important. Accordingly, the employees who are almost in the same age help each other and share their opinions on different affairs (Soleimani, 2010).

Another aspect of the adoption of new technology is "moral values". The arrival of new industrial technologies into the Kurdish areas promotes the ethical values such as moralization, work ethics, healthy competition, and meritocracy. One of the respondents, for instance, believes that material values are not merely necessary for development and that we shouldn't prioritize all our needs to satisfy them: "If there is a instructive competition among human beings and they do not think that they should get all things that others have with all possible means, there will have a useful and productive life. In fact, competition to achieve knowledge, God's grace, and righteousness will result in progress and development. Of course, this is not important for all people and some people are trying to achieve success and it makes no difference how to get it. On the contrary, the acquisition of higher positions in the society through great efforts is more enjoyable and makes our life more interesting.

"Rational values" are another category of consequences of the adoption of technology by the traditional society under investigation. The entrance of new technologies into the Kurdish speaking region will promote rational values such as rationalism, belief in knowledge and expertise, intellectualism, empiricism, and new thinking. For instance, many employees believe that experience is more important then knowledge and awareness since in many cases experience will bring about much knowledge and awareness. One of the participants says "I we did not employ the past experience we couldn't be successful. The past experience helped us much to progress continuously. Experience will lead to success. When I graduated from college I wasn't experienced as I had learned the material theoretically. But at the moment my practical experience is greater that that of the company. This is why I believe that in some cases experience is more important than knowledge."

Another aspect of the adoption of new technology is "egalitarian values". The arrival of new industrial technologies into the Kurdish areas promotes the egalitarian values such as positive attitudes towards women's rights. However, in the quantitative data, it was found that there is a significant difference in the attitudes towards women's rights in the industrial sector and nonindustrial sector, indicating that the traditional society greatly respected women's rights; a value not changed significantly by technological elements. In other words, women's rights have been observed in traditional Kurdish   values.

Another outcome of the adoption of technology into the traditional societies is "traditional values" which constitute the stable part of indigenous culture as a basis for decision making in such societies. The entrance of new industrial technology into Kurdistan has not weakened traditional values such as belief in revelation, virtue, traditionalism, religious fundamentalism, and God-centeredness and these values have remained unchanged despite the entrance of the industry into the region. Among sub-category of God-centeredness we can refer to concepts such as God-given blessing, reliance on God, the God as the lord of assets and the Universe, God as the observer of actions, and actual knowledge of God. The sub-category of the religious fundamentalism covers the observance of divine laws, the fulfillment of legitimate aspirations and objectives in Islam, Islamic laws, and the Sharia injunctions. The sub-category of traditionalism includes observance of Quran laws and the Sunnah, adherence to customs, belief in God, the Quran, and the   Prophet,   and   the   necessity   of   learning   religious   doctrines   and   teachings.

This stable part of the traditional culture is called the stable cultural part which serves as a basis for the development of the society and its resistance against the invasion of other cultures. This is the stable cultural part in the society that leads to fundamental changes. This main category includes 35 concepts which have been incorporated into five sub-categories. Another point to be mentioned is that the tradition is not a hindrance to development and progress in the Kurdish society. There are many people in the industrial and nonindustrial sectors that believe in God, tradition, religion, and revelation at the time of the arrival of technology and modernization in the society. For example, one of the participants in this study believes "Although we have been grown up within an Islamic culture, we have never been lazy and never praised poverty, isolation, and seclusion. In contrast, we have never submitted to the material affairs because

we believe that God is owner of everything. Peace, blessings, and mercy of God, His Prophet, and angels upon those selfless who spent their wealth in the way of God and the spread of Islam".

This fact and other similar cases show that modernization theories that are against traditions are insufficient to come up with a comprehensive of traditional societies such as those in the Kurdistan and are not able to grasp the complex realities of the societies under study. On the other hand, development based on such traditions is taking place as in Momtaz Electric Industries. As a result, it is not possible to develop a universal model for industrialization and to eliminate traditions. Rather the fact is that it is only through reliance on traditions and values of local cultures that we can achieve development and progress. Traditions and traditional values are not obliterated in modernization process but rather they are reconstructed and renewed and create the culture of the society along with modern values. This leads to a state of cultural and social stability and therefore it can be said that technology does not distort "traditional values".

Environmental pollution is another consequence the entrance of technology into traditional societies. Piranshahr Alcohol Factory was closed for creating too much pollution for more than a year. Although the factory was very lucrative, it was not built based on environmental standards. One of the obvious consequences of industrial wastewater produced by Piranshahr Alcohol Factory was that the fruit trees along the river were dried, fishes and other living organisms in the river were died, and serious harms were made to animals and poultry such as cows, geese, chickens, and ducks in the regions nearby the river. On the other hand, the unpleasant smells have caused some problems for residents adjacent to the industrial wastewaters produced by the factory. One of the informants pointed out "The alcohol factory generally caused two types of pollution: industrial wastewaters and horrible Ammonic smelling which spread throughout all nearby (mainly western) villages such as Rozgari, Darbake, Bardehghol, and Eshnozang. When a strong wind was blowing the smelling reached the suburban areas. In addition, pollution caused by industrial wastewaters created a number of problems for gardeners and farmers who were always complaining as these wastewaters caused much damage to their crops. Moreover, as the swages were dumped into the river, the water became extremely polluted and, as a result, all aquatic creatures died. The pollution resulting from stagnant water has produced a large number of flies and mosquitoes with high-strength stings. The existence of garbage dump is another cause of pollution". As a result, it seems that when evaluating the outcomes of entrance of technology into sectors other than social and cultural sectors, the attention must be paid to environmental outcomes as well. Therefore, based on what was reflected in the represented model it can be said that finally development has taken place in Kurdistan traditional society in an uncompleted, partial, and aborted form.

9. REFERENCES

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