Review of policy-making studies of citizens' engagement in environment

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ABSTRACT

The environmental problems and issues and attempt to improve the environmental conditions for humans and other faunas are one of the most important challenges faced by developing countries such as Iran for many years. It should be confirmed in such conditions that governments can't solve all the imposed problems and damages to the environment. Therefore, some duties should be divided between government and citizens and people change from inactive observers to responsible citizens to improve their living environment resources. In such conditions, governors, decision-makers, and senior managers of the system won't have any solution except alignment, engagement, and interactions to reduce the environmental problems and improve environmental indexes to rescue from these conditions. This interaction and cooperation will be possible only in light of the acquirable sustainable development principles. Lack of systematic awareness and knowledge in this field among managers and decision-makers of the country is one of the biggest problems and challenges in this field. Thus, this research, as a developing and yet applied study, tries to examine the articles in this field and design a policy-making pattern for civic engagement in the environmental field according to the importance of environmental plans and public engagement in developing its protection in the economic plans.
Keywords: policy-making, engagement, citizen engagement, environment, environmental policy-making

Introduction

Some scholars believe that the issue of "policy-making" should be discussed as an independent scientific field, and most studies in this field have considered policy-making from a processing view and introduced it as a determined and relevant step. However, it should be noticed that the "process approach" to policy-making has no conflict with the "content approach". Studying the subject of policy-making regardless of the content of its issues will not bring much practical benefit. In other words, policies are made because of the occurrence of the public issue. Therefore, all policies can be divided based on the content of problems they try to solve. Shafritz, a scholar of this field, in the book "an introduction of policy-making" selected the content approach instead of the process approach in policy-making and divided policies into 8 proper classifications to their problems contents. These 8 fields include:

1- Economic policies
2- Educational policies
3- Environmental policies
4- Public well-fare policies
5- Civil rights policies
6- National defense policies

7- Criminal justice policies

8- Public health and hygiene policies

One of the introduced policies by him is "environmental policies". This classification is confirmed by many researchers (Firsova, 2007; Heggelund, 2003; Torres, 2009). Thus, it can be ex-licitly said that the environmental issues are very one of the important and significant general problems of the governments with no doubt about it.

Public policy is influenced by economic, social, and cultural factors of the society as well as the governmental official structures and other political system factors and characteristics. The policy-making process both influences and is impressed by its surrounding (political, economic, and social factors). Actually, policies are the product of the political environment, values, ideologies, power, institutionalized principles, and decision-making processes (Barret& fudge, 1981). Alternatively, citizens' engagements will be basic prerequisites for the success of programs and the achievement of efforts and policies. Citizens; role in policies from coding to execution is the principal and essential component to reaching sustainable development. On the other hand, the results of researches show that decision-making without considering the real ideas of citizens and their views will lead to the inefficiency of the made decisions (Portney, 2005). It is not exceptional in Iran. The statistics and numbers such as the report of the world countries about the environmental performance index in 2016[1], which is the rank of 105 out of 168 membered countries in the list and its yellow parts mean the involved countries in the environmental issues, shows this fact. On the other hand, based on the official international statistics, the environment in Iran needs to change the views and apply more serious approaches to protect and improve the conditions. In addition, according to the proposed landscapes for 1404 and relevant policies, Iran is supposed to get the superior rank in various economic, social, and environmental indexes. However, by looking at the environmental index, it is seen that Iran ranks among 24 states of the Middle East and North Africa is very week in rank 18 based on performance (Esmaeilifar et al., 2107). Iran environment threatens various types of problems whose great part is caused by human activities and little part is caused by natural phenomena. However, human intervention in the environment and its negative effects show themselves well in the current environmental conditions of Iran; Consecutive fires in forest areas (on average, 35,000 ha of the country's forest areas are affected by fires annually), a phenomenon of dust that affects 17 provinces of the country annually and is considered a national crisis (Babaoghli, 2013), destruction of river life due to the entry of human and industrial wastewater, destruction of rivers, ecological pollution of the Persian Gulf due to the annual traffic of 30,000 ships in it and gradual destruction of life in the Caspian Sea due to the entry of sewage, destruction of wetlands and freshwater lakes inside the country and the damage done to them reached the border of crisis and are near to the point of non-return (Behbudi et al., 2014). Of course, there are factors of Iran location in dry and semi-dry regions, the occurrence of long-term drought, pressure increase on natural resources, the traditional and importer approaches of agriculture, industrial activities particularly in the field of gas and oil, urban life development, and the caused pollutions, severe global climate change (Kermani and Hamkaram Madani, 2019).

In such conditions, the governors, decision-makers, and senior managers have no choice except alignment with people, engagement mad interactions to reduce the environmental issues and improve the environmental indexes to rescue from such conditions. One of the most obvious examples of public interest is considering environmental issues and long-term planning in the form of strategic policies. Actually, the consideration of the public engagement in the environment protection activities on one hand and the undesired environmental condition of the state on another hand is the third side of the triangle o the role and importance of the long-term governmental planning for the environment. The environmental issues have a specific status in the theoretical literature of public management and public policy-making because of their crucial effect overall society. Thus, the environment authorities should always try to use the public engagement optimally regarding the unique role of the human role in the environmental plans and even policy-making procedure for the environment along with the public benefit development (Aslipour et al, 2014).

This interaction and cooperation are acquirable in light of using the sustainable development principles. Based on the definition, sustainable development is the growing and balanced economic development with the extension of social justice and equality tied to environmental sustainability to improve people's social and economic life (Gouda et al., 2018). The perception of the government planners and policy-makers has gradually changed far of development concept simultaneously with increased popularity and acceptance of sustainable development and the existed landscapes in its inside and this time they knew the accomplishment of the public engagement as the only solution to develop the communities (Inman, 2013). This continued until the policy-makers introduced the active engagement of people in a part of the steps of the coding and implementing of plans as the main factor to succeeding in them (INGO, 2009). Therefore, non-attention to the public engagement systematic promotion in the public policy-

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[1] *EPI, 2016. It should be noted that this report is ten years old and the next ranking will be determined in 2026.*

making has made negative consequences, particularly in the environment. Thus, coordination and alignment among governments, environment-involved organizations, and people are essential to protect the environment. It is tried in this research to provide the public policies for the environment based on an image out of the existed literature.

Theoretical bases
1- Policy
A comprehensive and universal definition of "public policy" has not yet been provided. In addition, it is not clear how it should be explained because many impressive and affective factors are involved in the process of policy-making. . Merriam-Webster Online Dictionary (2018) defines policy as "a type of activity selected among various variables in a determined condition to guide and make a decision to be used in the present and future time. Prewitt & Eulau knows the public policy as a sustainable decision to coordinate public performances. Based on Buchholz's idea, public policy is the selected decisions and policies by the public sector authorities such as the parliament, the government, and the judiciary, which represent the protection of the public interest of the society. Anderson defines public policy as a targeted series of actions that is formed by an individual or a group of authorities with the legitimacy of policy-making to cope with a public dilemma. Based on Dye's idea, the public policy is called to all issues selected by the government to be or not to be accomplished (Tomas Dye, 2018).

1-1- Definition of the environmental policy-making
The environmental policy-making has been a subset of the government public policy-making and actually a coordinated set with the governmental macro policies whose main concern is the elimination of the caused problems by the environmental issues in the dominant political and social spaces. Policy-making in the political power field is usually varied and heterogeneous, while a policy in the industry space mentions the affordability and maximum utilization in its design. Therefore, the maximum productivity from the minimum resources is thought. In an environmental policy, observing environmental regret needs the health of the environment and nature not to be sacrificed more for production. The point is to design and execute the state macro policy in a way to consider all concerns, economic development to be tied to the natural environment health, the physical field development of science production to be tied to the quality increase, technology promotion to be aligned with culture-making of its use, and overall, all the public wills and the governmental policies should be in balance in two scale-pans. Needless to say, policy-making in any field requires knowing the hidden requirements in the intellectual geography and scientific paradigm of that field (Rahimi, 2013).

Since the policy-making was stated previously, the problem-solving process is general. Therefore, the steps of policy-making can be counted corresponding to the steps of problem-solving. With these interpretations, the policy-making process includes specific and separate steps that should be considered in the field of the environment including:
1- Coding the environmental policies
2- Executing the environmental policies
3- Evaluating policies

Policy-making is divided into 5 groups in Table 1 whose first three steps are the subset of coding the public policies and is the expansion of the coding step.

Table 1: Correspondence between the public policy-making process and the problem-solving process (Hawlett & Ramesh, 2009)

Steps of policy-making	Correspondence between the steps of problem solving	Actors of each step
Order of policy-making	Problem recognition	Whole impressed society by policy
Policy-making	Suggested solutions	Direct beneficiaries of policy
Decision making	Final solution	Government
Policy execution	Execution and modification of solution	Direct beneficiaries of policy
Policy evaluation	Control and monitoring results	Whole impressed society by policy

The environmental policies are usually inter-sectoral. It means that each of the governmental modernizations has a responsibility to a part of the environment. Therefore, the design and execution of the environmental policies need to pay attention to the sectoral and economic dimensions. This integration should be in both vertical and horizontal directions. Therefore, the environmental issues should be brought to the attention of authorities and policy-makers to find solutions for them. These solutions should be able to solve the problems of this field and prevent its repetition. The governmental policy-makers are so involved in the complicated bureaucratic problem that is difficult to make them aware of the new issues. Obviously, the dominant political system in the democratic systems will put issues on

its political agenda sooner, following public demand because issue announcing ways are easier due to the stronger role of public thought in forming the social norms.

2- Public engagement

The engagement has an old history in human social life and is an idea reflecting the social and political theories particularly about the organization of communities. Its logic is based on reacting to centralism, bureaucracy, inflexibility, and unavailability of government. Roberts (2008) believe about public engagement in governance affairs that civic engagement is a process where the society members (without the governmental and administrative positions) are contributed to the essential decision-making and relevant acts to society with the governmental authorities. This process includes people in sets of beneficiaries, institutions, and networks who consult with each other and take collective action to develop their civic identity and be involved in governance processes (Bradbury & Williams, 2012: 2).

3- Civic engagement

Callahan looks at the interaction between the citizens and city management which are mostly about policy-making and providing civic services similar to civic engagement. This view is different from the political civic engagement view which emphasizes the right to vote and select the urban authorities. According to his idea, citizens' engagement has a direct and non-mediating effect on the relevant policies to the city and its execution, and citizens are looked at as the main pillar of the government (Challahan 2007: 1181). Various definitions are provided for civic engagement. Webster introduced civic engagement as an active engagement of citizens in various governmental fields and related affairs to manage the civic society (Roberts, 2004:319). In other words, civic engagement means people's engagement to find a solution in the public affairs according to a series of benefits and priorities in form of networks and institutions which helps the development of civic identity and contribute the governmental procedures with citizens (Cooper, 2005: 534). Civic engagement may have different meanings for various people. Engagement in the local development is defined as sharing an extensive spectrum of beneficiaries in the whole development procedure which includes recognition of issues, detection of solutions, and use of proper strategies (Bowen, 2008: 66).

The importance of citizens' engagement is so far as some scholars know Chaos of the 1960s as non-attention of Americans to the views of citizens especially minorities such as blacks (Cunninghamm, 1976:277).

4- Sustainable development

Sustainable development is a form of it where welfare for today's generation does not reduce the welfare of the next generation, and the environment is an important matter in this approach (Damaeifar, 2017).

5- Environment

The environment knowledge is both associated with the physical and experimental sciences in addition to the association with social and humanistic sciences with the inseparable bond. Alternatively, it is like the environment as life surrounding in compassing human with permanent relationship and reaction with him. Most Knowledge fields are related to these two in some ways (Pourezzat, 2018).

6- History of public engagement

The growth of the desire of citizens to participate in public affairs accelerated in the first three decades of the twentieth century and engagement in voluntary programs can be considered as a sign of this trend to improve the urban environment. Some plans were executed in the middle of the 20th century which needed citizens' engagement including a fight with poverty and urban renewal programs. However, in the first half of the 20th century, people relied on government officials to do things, but during the last decades of the 20th century, an increase in direct citizenship and much effort in this area were seen (Dixon, 1975: 69).

The significant growth of civic engagement was observed since the 1970s, and this decade continued to the next ones in a way that today various institutions and associations are active in civic engagement, and engagement is known as the main core of the public policies (Ebersold, 2007:737).

For example, it was imagined up to the 1960s and 1970s that the environmental issues are more complicated to be thought by the public engagement at the local level. Nonetheless, this thought changed in the 1980s and 1990s and the local governments found an important and significant role in this field (Portney, 2005: 597).

Now, citizens are active in various fields of local development, crime prevention, public transportation, and environmental planning (Thomas, 1997: 435).

The engagement mechanisms used today try to enable people to have an active and principal role to make decisions that are effective in their lives (Cornwall and Gaventa, 2001: 32).

7- Benefits of civic engagement

The presence of aware citizens and spontaneous popular groups can still contribute to the effectiveness of policies even when policymakers are democratically chosen (Doamekpor, 2004).

Engagement has various benefits at the personal, group, and social levels. An engagement using the citizens' power and resources brings awareness and insights for them which result in making proper decisions and policies for society. Moreover, civic engagement helps the fair distribution of power and empowerment of the weak social classes (Bowen, 2008: 67).

Strengthening the sense of social belonging, increasing public trust, and finding new ways to solve complicated problems are the results of civic engagement (Denhardt et al, 2009: 1269).

Citizens' engagement can be observed in various fields of housing, green space, urban transportation, environment, and urban planning (Ali Mohseni, 2004). Furthermore, the neighborhood-oriented engagement methods in environment protections particularly forest are another successful sample in this field (Carr and Halvorsen, 2001: 117).

Literature review

This review research was conducted with emphasis on the domestic studies relevant to the public policy-making and environment, and research background is offered as Table 2 about the relevant issues in summary and based on librarian method:

Table 2- Literature

Authors	Year	Issue	Methodology traits	Main findings
Soleimani et al	2019	The effect of place attachment components on social engagement in environmental protection	Descriptive-survey sampling of district 1 of Tehran municipality	36% of the positive changes of citizens' environmental engagement can be impressed by the identity components and location attachment. Meantime, the identity component has been more effective than the attachment component.
Rahmanpour et al.,	2018	Studying the role of environment training role of local communities in the citizens' environment performance	semi experimental Convenience sampling Control group and their training District 5 of Tabriz	Environmental education of citizens of Tabriz district 5 has a positive effect on waste management, optimal water consumption, pollution reduction, green space, optimal energy consumption, and environmental protection.
Mohammadi and Azadbakht	2018	Evaluating the components of citizen engagement in environmental sustainability	Descriptive-analytical District 2 of Ahvaz city	The level of citizen engagement in important indexes of environmental sustainability has been evaluated. There is an inverse relationship between the age level of citizens and engagement. The level of education of citizens is directly related to the level of their engagement in sustainable environmental development.
Armaghan	2018	Strategies to increase public engagement to promote environmental indexes in rural areas	Descriptive-survey SWOT model Villages in the central part of Melard	Educating and informing the villagers and changing the consumption pattern are the most and the least effective factor to promote public engagement to solve the environmental problems of the region, respectively.
Kafashzadeh	2017	Effective participatory contexts for the engagement of non-governmental organizations in the environmental policy-making process	Convenience sampling Tehran province	Environmental NGOs can play an effective role in the environmental policy-making process by participating in environmental decision-making and monitoring and evaluating post-implementation environmental policy-making.
Goldar et al.	2017	Designing a conceptual framework for beneficiaries of public policy-making engagement	qualitative analysis Librarian studies and semi-structured	Contextual, facilitator, and prohibit factors, identification and confrontation with the public issue, beneficiaries engagement in public policy-making, desirable policies and twenty-one components such as recognition and public problem perception, identifying the effects and consequences of the public issue, identifying beneficiaries, analyzing beneficiaries, determining the level of importance and prioritization of

			interviews	beneficiaries, choosing a beneficiaries engagement strategy, beneficiaries satisfaction. and policy execution easiness
Maleki and Sarvestan	2016	Citizens' engagement in services and environment of urban areas	Descriptive-analytical, survey Sampling Baghmalek city	There is a significant relationship between citizens 'engagement and their awareness in urban affairs management, between citizens' engagement and gender and education of citizens, between citizens 'engagement and urban services, and only a significant relationship has been confirmed between age and citizens' engagement in urban affairs management.
Aslipour and Sharifzadeh	2015	The state environmental policy-making strategy in the context of conventional theories of public decision-making	Grounded theory Interview	The most obvious example of "public benefit" is the environmental considerations in the provision of public services. The present conditions of the state environmental policy are impressed by the duality of "protection-utilization", "structure-function", and "knowledge-action". In addition, the efficiency of some models and approaches of public policy are more than other designed models because of the nature, climatic, and political requirements of the environment.
Aslipour et al.	2014	Explanation of the native model of the state environmental policy coding Using grounded theory	Semi-structured interview	Environmental actors are related to the vital classification of research as causal conditions in coding environmental policy by the strategy of "environmental actions". However, "environmental super-policies" as the interventional factors, "soft" and "hard" factors as the bedding factor facilitate the coding of environmental policies.
Mohammadi et al.	2013	Citizens' engagement in urban affairs and the effective factors on it among citizens	Sanandaj sampling	There is a significant relationship between the variables of satisfaction with municipal performance, socio-economic status, belonging to the neighborhood, use of mass media, knowledge of how to prepare and implement urban development plans, trust in city managers, membership in neighborhood associations, age, and gender
Hosseini et al.	2013	Urban sustainability based on the development of civic engagement	Survey, causal, and correlational Sabzevar sampling	1) There is a significant relationship between the type of occupation of a residential unit (sense of ownership) and the interest of citizens in participating in urban management. 2) There is a significant relationship between the number of years of living in the city/neighborhood and the citizens' engagement in the management and planning of city development. 3) There is no significant relationship between the age variable of citizens and their engagement in the planning and decision-making process of urban development management. 4) There is no significant relationship between the level of education of citizens and their tendency to engage in city affairs 5) There is a significant and positive relationship between citizens' engagement in urban management and the level of social correlation of citizens (neighborhood, district, or city), creating, and improving a sense of spatial belonging, increasing public and social security and citizen satisfaction with their lives.
Rajabi	2012	Methods of civic engagement in urban development processes	Theoretical Fundamental	Philosophical views on popular engagement can be summarized in 4 classifications of association theory, consultative theory, social learning model, and community power theory. Furthermore, the different levels of public engagement in urban projects can be divided into spontaneous engagement, interactive engagement, functional engagement, engagement due to material motives, and passive engagement.
Zahedi	2012	Urban management and explaining the citizens' social engagement in municipality	Library-documentary and secondary analysis	The state municipalities can cause the idea of the municipality as a social institution by institutionalizing social engagement among citizens.
Hashemian et al.		Citizens' engagement in the administration of city affairs	Survey Mashhad	There is a significant relationship between the variables of the sense of powerlessness, awareness of engagement in urban affairs, age, social relations network, social trust, association membership, socio-economic status, and satisfaction with municipal performance and participants' engagement in urban affairs. The most effective variable on citizens' engagement in urban affairs is satisfaction with the performance of the municipality.

Rahnama and Razavi	2012	The effect of Sense of spatial belonging on social capital and engagement	Analytical and correlation, Mashhad	An indirect causal relationship and strengthening the sense of spatial belonging increases engagement and increases social capital.
Ziyari et al.	2009	Civic engagement and its role in urban management of small towns	Survey Galedar, Varzaneh, and Hidaj cities	The mental dimension is the tendency to participate very highly, and there is a very good attitude to participate in these cities. In the objective dimension of engagement is at a weak level which has been measured through the factors of public engagement in urban organizations and institutions, engagement in recent elections, and interaction with acquaintances, people's engagement. There was a significant relationship between the mental dimension of engagement as an independent variable and public engagement. It was found that there is a significant relationship from the mental dimension of engagement in these cities and the context of engagement in the studied cities is very high.
Ohment Chuan and et al.	٢٠١٩	Perceiving the relevant issues of the civic engagement	Sampling In-depth interview Malaysia	Some barriers to citizen engagement have been identified including dependence on government resources, mismatch of interests, and life cycle engagement approach.
Lee and Schakter	٢٠١٩	The relationship between trust in government and theories of civic engagement	Sampling Regression analysis	People who trust government institutions are more likely to vote. However, data shows the limited support for trust in government and a negative turnout.
Aris Comparsos et al	٢٠١۶	Civic engagement as a political ritual	Cancer patients, stroke patients, and premature babies	Ritual performance in public engagement and patients neutralizes the transformational potential of citizens' engagement, and draws broader sociological implications for citizen engagement beyond health.
Wu and Jang	٢٠١۶	The lost chain between civic engagement, satisfaction, and public performance	SEM San Fransisco	Higher levels of civic engagement are tied to civic satisfaction. The perceived evaluation of public performance accountability for municipal services mediates the positive relationship between engagement and citizen satisfaction.
Gransbrandt and Liu	٢٠١۶	Civic engagement approaches in the environmental health	Theoretical study	Citizenship science and citizenship observations are two approaches used to reduce the complexity of solving environmental issues through citizen intervention that are considered by policymakers. Finally, five steps are presented to make citizen engagement beneficial in this research.
Kristie Kuhier	٢٠١٣	Qualitative engagement of citizen in public health centers	Iowa State	The experts seeking to empower consumers to play a role in service delivery must know what facilitates the quality of citizen engagement to ensure that consumers have a legitimate voice in the policy development and implementation processes. In addition, the results of this study show our understanding of citizens' engagement in different types of policy development processes.
Fiorino	٢٠٠۴	Civic engagement and environmental risk	Fundamental/theoretical study	study of 5 organizational mechanisms involving the public in their effect in environmental risk decisions, including public meetings, initiatives, public opinion polls, law-caused discussions, citizen review groups
Scoofer and Gorinas	٢٠٠١	Structural contexts of civic engagement: a study of membership in voluntary associations with a comparative view	32 states	Membership in associations is influenced by factors such as differences between the structure of governments, political institutions, and the political culture of nations. These variables determine both the level of engagement and the type of associations in which individuals operate.

Discussion

Based on reviews, the localized models' role in policy-making of civic engagement in the environment and the state need to develop such models were referred to make the governments; activities more efficient in the environmental protection field. One of the biggest problems and challenges in this field is the lack of a transparent image of the present condition and conditions of the effective use of citizens in the environmental fields for managers and decision-makers to use the high potential of citizens. This is because of no coherent model to make policy for civic engagement in the environment and lack of awareness and systematic knowledge in this field between the state

senior managers and decision-makers. In this regard, it seems that coding a native model is essential to reach this goal. It should be noticed that the engagement model in each state depends on people's attitudes toward engagement and their views about governments. For example, the Japanese believe that the government has a responsibility to take care of the welfare and social affairs and there is more engagement in organizations that have close ties to the government. However, Americans believe this is citizens' duty to improve the social and welfare conditions by their direct engagement. As a result, they engage in the independent organization from the government and act autonomously (Haddad, 2006: 1221).

 In Iranian society, culture-making and creating social conditions for the acceptance of policies are very important for environmental policies to be fully implemented, along with legislation and anticipation of civil and criminal enforcement guarantees, and make the execution of policies easier. Meanwhile, the role and status of parliament are very effective and important. The sole legislation regardless of cultural, political, or economic contexts brings the regulations that only thicken the legal framework and make its implementation more distant and impossible. Principally, coming laws from social will have a better chance of success. On the other hand, the approval of the parliament, as the representative of the citizens, will regulate the policies in their legal form and smooth the next steps in the implementation of the environmental policy, and its evaluation and monitoring in the next stage (Pourezzat, 2018).

 The legislation of policy in the environmental policy execution process will have an important role in the success of execution. If policy legislation is aligned with the public acceptance, it will be executed with the minimum public friction or resistance (Pourezzat, 2018).

Ensuring the engagement of non-governmental organizations will execute the environmental norms. In fact, a part of the executive duties of the government in preventing environmental crimes and pursuing the execution of environmental policies are assigned to NGOs by the gradual replacement of them.

As it was observed in reviews particularly the domestic ones, there is no attention to provide a local model for civic engagement in environmental policy-making. Most studies refer to the studying factor and variables in their inferential analyses. However, the importance of this issue is not limited to study the correlation among variables. Despite variables, a comprehensive model seems necessary to have citizens engaged in the public policy-making essentially for the environment. Hence, after the qualitative content analysis in this research, 5 dimensions and 40 items in three classifications were determined in contexts of binding, bedding, and facilitating. Altogether, forming the effective factors and mechanisms to execute the outsourcing are cultural policy-making with the futuristic approach which is shown in Table 3.

Table 3- Dimensions and components of each biding, bedding, and facilitating factors

Factor	Dimensions	Components
Binding	Upstream and strategic documents	Guidance and leadership of the trustee systems
		Imparting policies, rules, and regulations
		Promoting mutual landscape
		Alignment and strategic interactions between the governmental systems, directing the ecosystem expectation of public
		Environmental concern-based policies and procedures of society
	Contextual and managerial factors	Institutionalization of public engagement approach in society along with the environment
		Mentality of the governmental systems to the public engagement approach Managerial approach
		Managers' and authorities' commitment
		Key decisions by the organization's managers
		Managers' support of the trustee systems Preferences and expectations of the public engagement of the organization's managers
Bedding	Structure	Developing public engagement abilities
		Structural flexibility in the trustee systems
		Designing organizational structure with orientation of the needed interactions and communications
		Team-oriented approach in coding structure and organization Focus on informal and relational mechanisms
		Accountability to the trustee systems
	Culture making	Having organizational resources Extending environmental learning boundaries among society members

Finally, an important point is an avoidance to have a limited and local view to geography and specific province which are in many reviews. Therefore it is essential to have a more extensive horizontal vision to code the model.

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