



Model community participation Dayak in river area in management and utilization of Kahayan river

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Abstract

One of the government programs is the development of peatlands in 1995 that the Peatland Project (PLG) in Central Kalimantan has finally transformed one million hectares of lowland peatland and peatlands into areas of deforestation and serious degradation due to drainage and burning. Though looking at its specificity, Central Kalimantan geographically has its own distinctive features, namely altitude changes simultaneously from the south, which borders the Java Sea so that the northern part of the Gugusan Bukit Raya / Bukit Baka which is a protected area. From the existing data it is noted that Kota Palangka Raya is a provincial city in Central Kalimantan with an area of 2,678.51 km² with a typical peat area, which covers a vast area of land that is estimated to cover an area of 3.472 million ha, or about 21.98% of the total area of Central Kalimantan Province 15 which reached 798 million ha. Seeing the unusual condition hence required people who are ready to face the uniqueness of their own region with the management of the government, especially those involving the community in its programs. So, the question of research is how is the model of Dayak community participation in the area around the Kahayan river in managing and utilizing the river as a region that controls Central Kalimantan region. The research design to be carried out in relation to participation is a retrospective-prospective research design based on reference periods which means time frames aimed at exploring a phenomenon, situation and problem. Based on the retrospective - prospective design the author seeks to see the possibility of a phenomenon, situation, problems, attitudes and impacts of past trends and use them in the future. To improve the study, qualitative research is the research that underlies retrospective-prospective research design. The result of the research shows that local community involvement is very basic in the management of Kahayan river area. The local Dayak community has a way of participating for the purpose of river management and utilization. This concept is found from the research results in the field of Indigeneous Knowledge System excavated from the culture of local communities to manage and utilize the Kahayan River.

Keywords: Public Participation; Local Communities of Dayak; Management and Utilization Water; River

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1. Introduction

Palangkaraya City is a provincial city in Central Kalimantan with an area of 2,678.51 km² with a typical peat area, which covers a vast expanse of land that is expected to cover an area of 3.472 million ha, or about 21.98% of the total area of Kalimantan Province Middle 15 that reaches, 798 million Ha.

Besides its specificity, Central Kalimantan geographically has its own distinctive features, namely the altitude change simultaneously from the south, which is adjacent to the Java Sea so that the northern part of Gugusan Bukit Raya / Bukit Baka which is a protected area. So it is necessary that the community is ready to face the uniqueness of its own region with the management of the government, especially those involving the community in its programs.

In the science of State Administration, community participation means engaging the public in the making and implementation of public policy through participation. State Administration is understood as a government administration or government bureaucracy. This understanding departs from a public understanding that can be interpreted as those who work for the benefit of the wider community or government agencies. One of the government programs is the development of peatlands in 1995 which was implemented by the Peatland Project (PLG) in Central Kalimantan and finally transformed one million hectares of agricultural land that is a lowland swamp and peat to deforestation and serious degradation due to drainage and burning. Whereas the people in the former PLG should be aware and have a voice and role in planning their environment and the development of their surrounding areas. The inputs from the local community is very important to measure the effectiveness of the handling and will affect the continuous improvement of the plans and actions for the future, must be recognized and respected.

The importance of community involvement in the management of the Kahayan river basin is an important reason because in the management involved many of the elements involved are certain local governments, communities and organizations related to the local culture and environment. This reason is also motivated by the management of the river basin is the joint responsibility between public organizations and local communities around the river (Dissertation Sally M.Sihombing, 2016: 188)

Another reason for the river management is the division of tasks between public organizations and Dayak communities around the river (Sally M. Sihombing's Dissertation, 2016: 191-194), and the results of research showing that in the management of the Kahayan River area found understanding of organizational culture as internal integration and external adaptation in practice characteristic of organizational culture (Dissertation of Sally M.Sihombing, 2016: 200)

From the previous research it can be concluded that the implementation of land and water management practices is very important for the community around the river and aspects of community life such as fisheries, agriculture, tourism, water quality, transportation and health in the river area is closely related to ethnic and cultural background communities around the river and the biophysical conditions created by Kalimantan's nature is the river. (Main Synthesis Report, October 31, 2008)

Researchers are aware of the need for a solution to the problems that were previously expressed, namely the importance of public participation from the community around the river in supporting the management of

the river. For that reason, the researcher makes public participation model (Arnstein, 1969; Hartz, 1992; Preety et al., 1995) with the title of ladder of public participation from society participating until society does not participate. Parsipatoris research is used by researchers to see how the involvement of the Dayak community in river management with a model of public participation that has the following advantages: 1. Public participation becomes a means of representation of the Dayak community in supporting the healthy river management process. 2. The external adaptation of the established understanding between government and society is a major study in the process of public participation. 3. Public participation is more translated in the face of uncertain situations, and through the model of public participation then the public can interact with other parties even if complicated to cope with the changing circumstances of the fox.

Associated with river management, the researcher chose the model of participation in river management based on several reasons besides looking at the advantages offered by the model that researchers believe that when the development process around the community both the development of water facilities and infrastructure and maintenance, not considered, and through the application of public participation models to support the management of rivers, participating Dayak communities are considered to be something.

An overview of the problem that has been previously described provides the following problem formulation: What is the model of Dayak people's public participation around the river basin in the management and utilization of the Kahayan River?

2. Review of research library

2.1. Community participation

The participatory perspective is "a set of ideas about the role of public administration in the governance system that places public service, democratic governance and civic engagement in the center". Participation is a set of ideas about the role of state administration in the system of government as a place of public service, democratic government and the center of contract citizens with the government.

The public service view emphasizes not the issue of pedaling or directing and vice versa, but the public service places the central position of citizens in government. It does not merely involve personal interests (maximization of individual preferences as in the market system) but values, beliefs and concerns over others. Public interest is not a collection of personal interests, but a result of dialogue and participation in finding shared values and interests. So the role of public administration associated with public service is to involve the community from planning to implementing, serving the community not manipulation, and doing responsibly, ethically and accountably.

The paradigm as a new public service has the following principles:

- 1- Serve Citizens, not customers.
- 2- Seek the public interest, not a quick individual choice solution (creating shared interests and responsibilities)
- 3- Value citizenship over entrepreneurship, commitment to member contribution to society run by state servant, not entrepreneurial manager who manage budget like entrepreneur.

- 4- Think strategically, act democratically, collective efforts, and collaborative processes become more effective.
- 5- Recognition that accountability is not simple because it covers the statute of the law, values, social, political norms, professional standards, and more important interests of citizens.
- 6- Serve rather than steer, based on shared values and interests, rather than redirecting to new values of government or leader versions.
- 7- Value people not just productivity by means of a collaborative process on the basis of respect for everyone, will work in the long run.

Richard C. Box reveals the democratization of public administration on the scale of local government has several principles:

- 1- Principle of scale, involvement of the community more likely to the level of local government.
- 2- The principle of democracy, the process of governance involving the public in policy discussions and decision-making.
- 3- Principles of accountability, accountability to the public as owners of government whose achievement requires the involvement of the community and direct attachment of citizens with the compilers and implementers of public programs.
- 4- The principle of rationality, the awareness that participation processes require time, accuracy, opportunity to express opinions, accommodate diverse opinions and appreciate differences.

Mitchell et al. (2007) argues that there are several reasons for an activity to include communities in the management of the environment and resources, namely (1) to formulate problems more effectively, (2) to obtain information and understanding beyond the scope of the scientific world, (3) to formulate alternative solutions socially acceptable issues, and (4) establishing ownership of plans and solutions to facilitate application.

Slamet (2003) added that the conditions needed for the community to participate in development are opportunities in development, the ability to take advantage of the opportunity and the willingness to participate. For village-level development that requires much input from the village community, which can influence local communities to participate in development is very important and needs attention.

According to Hidayati (1999) for the community to participate there are two steps that can be done that is the identification and inventory and understanding of stakeholders and community empowerment. Identify and inventory stakeholders to find out what the involvement and reasons why involved. From this it can be seen the potential that can be donated by each stakeholders to support the implementation of community-based development.

Thoha (2010: 117) states that the scope of public policy is to arouse community participation to jointly think of good ways to overcome community problems. Without public participation, public policy is less meaningful, because for the traditional society, the government and political affairs are the responsibility of the elite, the general public does not know what the government is doing. but in modern society, democratic and supreme power is in the hands of society then the participation of the community is very important in government affairs including public policy affairs. That is why community participation is the scope of public policy review.

Participation in public policymaking is an activity undertaken by citizens, either individually or in groups that are planned to influence government decision-making. Participation can be either organized or spontaneous, either sporadically or continuously, peacefully or legally or illegally, both effectively and ineffectively. Of so many kinds of participation, participation tries to support successful and effective organizational policies. Thus, effective support for substantial social and economic policy is most likely derived from regularly organized collective participation.

Participation is sometimes done independently and sometimes carried out by mobilization. Independent participation is an effort to participate by the perpetrators themselves to influence the policy that will be made. For example, people who want to influence the government for the holding of marriage laws so that women are not underestimated by men. So many people are sending proposals to the government by sending their delegations to their own initiative, through campaigning, news, lectures, and open speeches. This community participation is called independent participation. While mobilization participation is the participation of the community in participating to influence government policy with how to be mobilized by others.

2.2. Utilization of river area

Environment is a place where people stand and have a link with the cultural system and local life of a community group because the community lives and utilize the various resources available in the environment in fulfilling the needs of life then there is a relationship between the community and *wiyah* where they live.

Suparlan (2005: 11) The environment associated with the water resources condition of a region has to do with the dynamics of the formation of a community group in utilizing water including on a group of people or ethnic groups scattered in various regions.

Sam'un (2007) reveals that the river is one of the water resources that has characteristic, characteristic characteristics and functions different from other natural resources.

To quote Savas, 1987 classifies water resources and states that river water is common pool goods. Characteristic common pool goods on the one hand there is difficulty to enforce exceptions to individuals, on the other hand consumption is individual. Characteristic is what causes river water is seen as a common property, anyone free to consume without exception. But because of the nature of individual consumption, river water can not be consumed in parallel, resulting in the opportunity of each party to be not the same. The first party tends to benefit, the chance of the subsequent party may be reduced or at least under different conditions. Whereas the common pool goods process or as tool goods are made within the organization or through joint actions can not be through market mechanisms.

At the level of policy practice, the concept of river water management shows hierarchical and coordination concepts. The hierarchical concept is contained in Law No.7 of 2004 on water resources. This law regulates river management across more than 2 hierarchical administrative areas. Despite the high potential of water resources, surface water resources in Indonesia are deprived during the dry season but floods occur. Given the challenges faced by the water resources sector and the irrigation sector in the 21st century and public sector reforms that pay more attention to the aspirations of the people. The Indonesian government has embarked

on a program of water resources reform covering policy aspects, institutional aspects, legislative and regulatory aspects, water conservation policies have substantial portions in the agenda reform.

Watershed management across different administrative areas requires coordination and integration of management policies from upstream-downstream, so that the policies implemented are not sectoral ego and respective regional egos. Watershed management should be comprehensive with regard to DAS as a unit of analysis and not administrative boundaries. Likewise, with the coordination between sectors related upstream and downstream, so that the activities undertaken do not run separately. To achieve this is certainly not an easy thing, but with a common commitment and shared awareness that in river basin management, the one river, one plan, one management principle indicates the importance of DAS managed as a unified whole of the natural resource ecosystem. Through this pattern, sector and partial ego management patterns can be avoided because the orientation and commitment of the planners, implementers and supervisors of watershed management programs will be addressed to joint institutions and cover the entire upstream basins (Asdak, 2007).

According to the Technical Guidelines for Integrated Watershed Management, DAS is a unity of ecosystems whose main elements consist of natural resources of land, water and vegetation as well as human resources as perpetrators of natural resources utilization. Watersheds in several parts of Indonesia bear very heavy burdens in relation to their very high population density and intensive use of natural resources so that there are recent indications that watersheds are declining with indications of increased landslides, erosion and sedimentation, floods and droughts. On the other hand the demand for its ability to support the living system, both upstream and downstream communities is so large (Ministry of Forestry, 2003).

Therefore, the need for a comprehensive approach in resource management planning needs to be considered because the disruption of one component of the natural system will affect the other components of the system. A comprehensive approach is an integrated study of all aspects of the resource by considering environmental, social, political and economic factors. To be able to perform integrated management, the Watershed ecosystem (DAS) can be utilized as a systematic, logical and rational planning and evaluation unit (Asdak, 2004).

Salim (2004) states that the pattern of development is only oriented to increase production and the needs of human life alone regardless of sustainability and sustainability causes various problems that arise. The partial approach and lack of understanding of ecosystems leads to self-development and ultimately causes harm to living things.

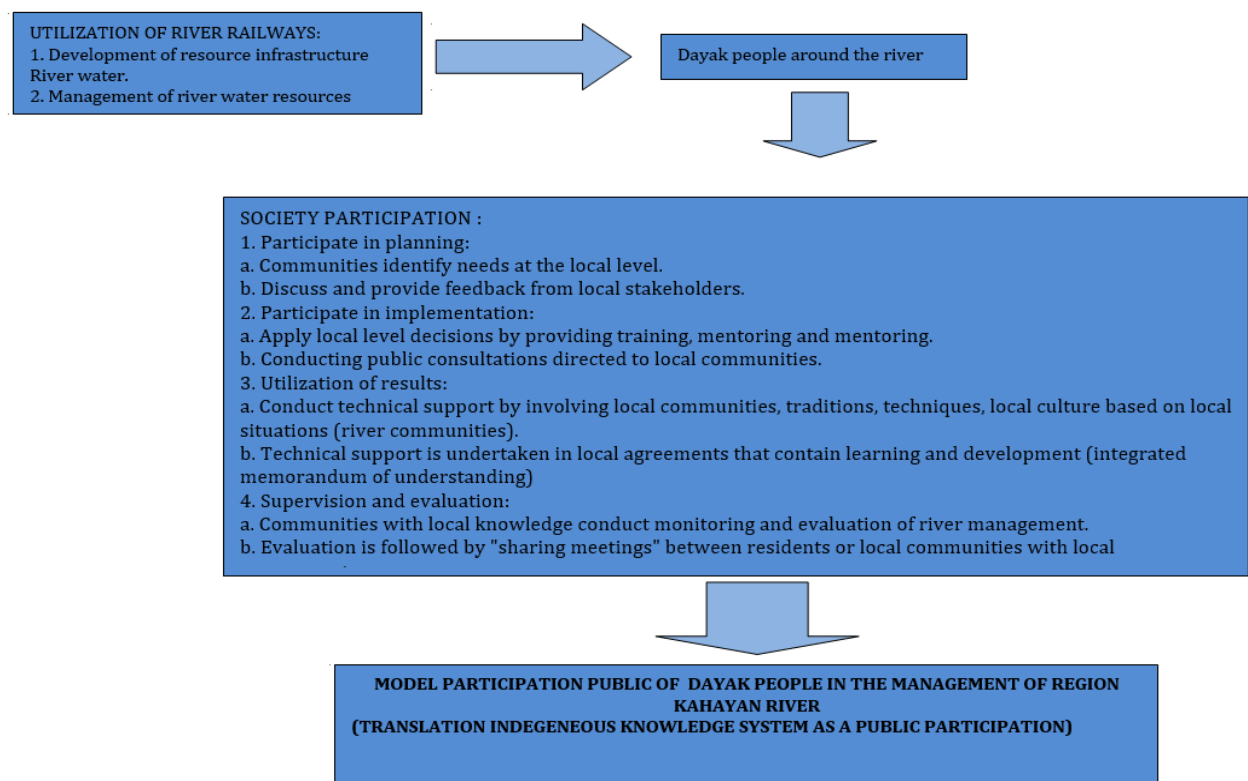
The general meaning of watersheds (DAS) is the land area which is a unity with the river and its tributaries, which is limited by topographic separators that function to accommodate water coming from rainfall, store and stream into the lake or sea naturally. With the definition of DAS, there is no difference between the definition of DAS and DPS. DAS and DPS can be match, because both are based on natural boundaries / topography.

Meanwhile, the river basin (WS) is a water resources development area covering one or more watersheds / DPS. The definition of DAS / DPS based on its position on the administrative boundaries of the SDA Bill is defined as follows:

- 1- DAS / DPS of districts / municipalities are DAS / DPS which are entirely within a regency / municipality territory;
- 2- DAS / DPS of the province are DAS / DPS located in more than one district / municipality administration area within a province
- 3- National watershed / DPS is a watershed / DPS located in more than one provincial or cross-country administrative region.

There are correspondence of DAS / DPS kabupaten / kota and district / municipality WAS, provincial DAS / DPS and provincial WS, and national DAS / DPS and national WS, since the watershed coverage may include one or more DAS / DPS kabupaten / kota, provincial and national levels. Also, there is a reciprocal relationship between river basin (DAS / DPS district / city, provincial, national) and spatial planning (RTRW kabupaten / kota, provincial, national). Both mutually influence and interactive in the development of social activities - an optimal and sustainable regional economy.

Public participation of the Dayak community in the management and utilization of the Kahayan river area can be described as follows:



3. Result and discussion

The Dayak community is a ginekelogical society that is a society that has institutions that regulate life together in the context of the environment or residence, and people living together in the lineage. The peatland environment is the area or environment that makes how the Dayak people are so high in the nature they occupy.

The result of the research shows the understanding of how indigeneous knowledge system can not be separated between the knowledge system and the mindset. As the mindset of the people around the peat swamp river deeply understand and interpret the peat as their residence area. It is evident from the Dayak culture that reflects that all symbols of the way of life, habits and beliefs are crystallized into works of art.

Therefore, the maintenance of a community culture that contains a system of local knowledge greatly supports the implementation of management. Such as giving meaning to what is owned by Dayak society like environment of peat swamp river, natural potency, local wisdom, custom, which is a worth worth to be preserved.

Through local wisdom, the researchers formulated that there is an effort to balance the culture of the local community with daily living activities and its relationship with the government as an actor in public servant through Culture Sharing. That is how the culture is understood in the community, and through the culture as well as the community is able to overcome the difficulties and challenges faced in the area where the community lives.

3.1. Translation indigeneous knowledge system as public, participation on system in Handil or Saka

Central Kalimantan, especially the area passed by the Kahayan river is a region that has many sources of water, but if there is a change of seasons (during the dry season) Kahayan river area is very short of water and in the irrigation needs of agricultural land and in the region most of the irrigation system obtained from the cistern rain. The results of the triangulation process with informants, the researchers explain in advance about the construction of the water gate and cultural significance contained in the construction of water gate (Handil / Saka).

Local people of the Dayak community have management of land and water by local wisdom called Handil or Saka. Observations made by researchers is the management of land and water conducted by local people (Dayak) called SAKA conducted by the tribe of South Kalimantan. While HANDIL is a river designation conducted by the people of Central Kalimantan. SAKA or HANDIL is also a small river with a width of 2 meters, made by the community or individual for the benefit of transportation or the flow of river water with the form of a river with a size that is fit for boats, jukung or klotok. Handil named different between 1 handil with other handil. Handil is managed by one large family or one village area, named in accordance with the agreement made by the group or based on the head of handil. Because the handil is controlled by the head of handil, so everyone who takes the water with the goal of watering community keperkebunan, it must be the knowledge of the head handil. Handil is led by the head of handil who is the elder of a certain community, the grandchild or the next generation of the owner of handil.

3.2. Translation indigeneous knowledge system as public participation in lanting house

Lanting House is proof that the Dayak people are river communities according to their identity. And so far the river is a widespread natural resource that complements the life of Dayak people, so that the identity of the

local community of Dayak Ngaju is more to the river community. So up to now the Kahayan River is used for any purpose with the fulfillment of 3 functions of shelter, transportation routes and the fulfillment of life needs.

Culture settled Dayak Ngaju community is a culture that is preserved by the Dayak community to utilize and manage the river into a lifestyle or culture that lies beside the river. Culture settled Dayak Ngaju community better known as development of Huma Lanting. The book of traditional architecture of South Kalimantan has revealed the existence of Dayak tribe who settled at home, which the house can be carried by river water flow. (house on boat) And Dayak people call it with Huma Lanting that is House above lanting or stem.

As researchers have revealed at the beginning of writing that when the Dayak people adjust themselves to the natural life. People tend to use natural materials that are easily found in the waters. Lanting is also called stem. How the Dayak people can live on the river by using batang. Melalui some stems are arranged into a place, where people do domestic activities such as washing, bathing and urinating. The pattern of living behavior of the river community is obliged to have a boat or jukung as a means of water transport that is used to trace water, so that the benefits of lanting or stems are utilized by the community to as a place to tether a boat or jukung.

Here the Dayak Ngaju people adjust to the natural state of the river. Like the river that flows and the community also uses the river as a place to live, which is called culture settled. The cultural purpose of living is the Dayak people prefer to live in the river with the consideration to access the source of life in the river. And the river becomes a suitable dwelling place to utilize the river in fulfilling the daily needs of society.

4. Conclusion

The concept of Indigeneous knowledge system (IKS) as a public participation of Dayak Society is a concept that is carried out in the management of peat swamp river in the understanding of social culture with localy paradigm approach (local paradigm). The underlying reason is the proximity of life values of dependence on the resources and ecosystems that feed communities around the peatlands. In such a framework, local people are better positioned to monitor and respond to ecological feedback. In a sense the Dayak community has detailed information that grows naturally as well as local knowledge mechanisms that are active in responding to the surrounding ecological changes.

In translation of the local knowledge system owned by the Dayak community, the Dayak community can face all the difficulties and challenges of the peat environment as well as to define themselves maturely as the person responsible for making the right decisions. Like IKS translations in attributes, historic buildings, tools and tools crystallized in cultural symbols that are rich in art and value such as saka / handil and lanting houses.

References

Andasputra, N., Bamba, J. and Petebang, E. (2001), *Lessons from the Dayak Community: Social Movements and Ecological Resilience in West Kalimantan*, WWF-BSP and the Dayakology Institute, West Kalimantan.

- Boije, H. (2010), *Analysis in Qualitative Research*, Sage Publication, London.
- Chandrawijaya, R. (2012), Colloquium Results of Research and Development of Water Resources, Overview of the Kapuas River Regime Potential in Central Kalimantan, Balai Rawa, Bandung 2-3 May.
- Chatab, N. (2007), *Profil Budaya Organisasi*, Alfabeta, London.
- Cresswell, J.W. (2010), *Research Design: qualitative, quantitative and Mixed methods approaches*, Sage publication, London.
- Faure, M.M. and Faure, L.M. (1996), *The Success Culture: How to Build an Organization with vision and purpose*, Pitman Publishing, London.
- Hariyadi, B. (2008), Management of traditionally natural rivers in Serampas, Jambi, Dissertation, UI Jakarta Postgraduate Program, 185 pg.
- Ismail Al-Alawi, A., Yousif Al-Marzooqi, N. and Fraidoon Mohammed, Y. (2007), "Organizational culture and knowledge sharing: critical success factors", *Journal of knowledge management*, Vol. 11 No. 2, pp. 22-42.
- Main Synthesis Report. Masterplan for Rehabilitazion and Revitalization of The Ex Mega Rice Project Area in Central Kalimantan. October 2008. Euroconsult Mott MacDonald and Deltares, Delf Hedraulics in Association with DHV, Wageningen UR, Witteveen + Bos, PT MLD and PT INDEC.
- Okrgwu, A.F. and Mencher, J.P. (2000), "Anthropolgy of public policy: Shifting Terrains", *Annual Review of Antropology*, Vol. 29, pp. 107-124.
- Saefullah, H.A.D. (2011), *Contemporary Thinking of Public Administration; Perspective of Human Resource Management in the Era of Decentralization*, LP3AN FISIP UNPAD, Bandung.
- Sangalang, I. (2013), Attachment to References on River Side Residential Dayak Ngaju Tribes in Palangka Raya, Dissertation. ITS Postgraduate Program Doctor Surabaya.
- Sawitri, R. (2012), Strategy for Environmental Management of Mangrove Ecosystems Around the Bogowonto River Estuary, Kulon Progo Regency, Dissertation, UGM Postgraduate Program in Jogjakarta.
- Sihombing, R.S. (2016), Characteristics of Organizational Culture River II Kalimantan Regional Office in the Management of the Kahayan River, Dissertation, Postgraduate Program at Padjadjaran University, 250 pg.
- Sihombing, R.S. (2016), Innovation that has local wisdom in improving village development. Pg.219-229. Proceedings of the 2016 National Seminar and Workshop Indonesian Association for Public Administration North Sumatra - NAD.
- Suciati (2010), Management of River Areas in Indonesia in the Regional Autonomy Perspective, Dissertation, UGM Postgraduate Program in Jogjakarta.
- Undang – Undang No.7 Tahun 2004 tentang sumber daya air.
- Weddel, J.R., Shore, C., Feldman, G. and Lathrop, S. (2005), "Toward an anthropology of public policy", *Journal of annals of the American Academy of Political and Social Science*, Vol. 600, pp. 30-51.