

Conference Paper

## Profile of Pam Jaya and Private Partners in Clean Water Supply Jakartan (Case Study Year 1998-2012)

Mary Ismowati

IISMI STIAMI

### Abstract

Jakarta as the capital city of Indonesia has the densest population in Indonesia which is experiencing problems in the field of public service provision of clean water. Providing clean water is carried out through a local company, namely the Regional Water Company Region (PDAM) abbreviated PAM Jaya and its aim is to be able to distribute clean water to all the people of Jakarta, in quantity provide water services running for 24 hours, in quality should be in accordance with the Ministry of Health Minister Regulation no.46 of 1990.

To improve performance, Pam Jaya had a policy of cooperation with the private sector in the form Public Private Partnership (Agreement of Cooperation / MCC) since February 1st, 1998 with Lyonnasise des Eaux France abbreviated PT. Lyonnase Pam Jaya (PT. Palyja) and PT. Thames Pam Jaya (TPJ). From 2003 cooperation with PT TPJ was transferred to PT. Aetra, in the form of concessions in the form of exclusive rights management for 25 years. From this cooperation is expected the private sector can bring a new fund to manage efficiently and can improve performance by better service, but with the water tariff is still affordable by the people of Jakarta.

The purpose of this research is to provide an overview of PAM Jaya 's profile in the provision and management of clean water for all communities in Jakarta, and analyze of cooperation with private partners.

This research is descriptive research with a qualitative approach that aims to accurately depict or describe something happening and going on, and could clearly and accurately describe the subject matter of this research, the problem of whether the implementation of the Public Private Partnership Pam Jaya with private partners in the provision of clean water with a case study in 1998-2012. This research was conducted from 2010 to 2012. The collection of data in this research is done by observation, documentation and interview with some informants consist of: 5 Senior Managers PAM Jaya, 10 Managers PAM Jaya and 20 represent customers PAM Jaya (Dormitory, Apartment, Households, Small industries, Flats, Buildings, and Social Institutions). The results showed 1). In 2011, the public private partnership has been running 12 years, the coverage of water supply only reached 62,75% (5,614,632 people in DKI). 2). Provision of water supply often does not flow 24 hours as promised PAM Jaya and even not flow at all. 3). Most customers doubt the quality of water from PAM Jaya so mostly only is used for the purposes of washing and bathing only, for the drinking most switch to bottled water. 4). Water quality in many customers is contaminated by T. Coliform and E. Coli bacteria that are harmful to health and content of Iron and

Received: 19 March 2018

Accepted: 27 July 2018

Published: 29 August 2018

Publishing services provided by Knowledge E

© Mary Ismowati. This article is distributed under the terms of the [Creative Commons Attribution License](#), which permits unrestricted use and redistribution provided that the original author and source are credited.

Selection and Peer-review under the responsibility of the ICSPI 2016 Conference Committee.

 OPEN ACCESS

Manganese in the water exceeded the threshold. 5). The composition of employees in the private partners PT. Palyja and PT. Aetra only 20% of employees of PAM Jaya, the remaining 80% of employees of private partners, it violates the provisions of the Employment Agreement. 6). Comparisons of salaries received by employees of PAM Jaya placed on the private partner (second date) still uses the standard PAM while private employees in the private partners with the same level of responsibility to the employees of PAM Jaya had paid a salary in accordance with the standards of the larger private partners. 7). There is no significant technology transfer from the private to PAM Jaya, if there is only a simple transfer of technology.

**Keywords:** Clean water supply, Public Private Partnership

---

## 1. Introduction

The demands of society to obtain better services must be addressed in an effort to create satisfaction in service delivery to the public. The reform of the public sector is done by applying the concept of New Public Management to implement the cooperation between the government and the private sector (Public - Private Partnership abbreviated PPPs) which aims to improve public services economically, efficiently and effectively. PPPs in the form of cooperation is the government still has the authority in a company or private individual organizations working together. One of the public service is service in the field of water supply which is essential in the provision of public services. Water is a basic necessity of life everybody needs.

Jakarta as the capital city of Indonesia is having problems providing infrastructure support in particular the provision of clean water. Provision of drinking water needs and distribution is carried out by the Regional Water Company (PDAM) and specialized in Jakarta abbreviated PAM Jaya, its activity is to collect, purify and distribute water directly through the pipe distribution to customers. PAM Jaya has the role of a social function means should be able to provide better service to society and the economy that is able to function as an accelerator of regional economy in contributing to the Locally-generated revenue (PAD).

Pam Jaya has as a Vision can provide drinking water to all the people of Jakarta and has a good quality, and customer satisfaction oriented. Mission and Objectives Pam Jaya as regional owned enterprises (BUMD) implements sustainable drinking water

services, both in quality and quantity to support the program of the provincial government of Jakarta realize Jakarta as a city service.

Pam Jaya Public Private Partnership has been doing since February 1 1998 with Lyonnaisse des Eaux (France), which subsequently became PT. Lyonnase Pam Jaya (PT. Palyja) and PT. Thames Pam Jaya (TPJ), starting in 2003 PT TPJ transferred to PT. Aetra. That is the date of February 1, 1998 all business activities conducted by PAM Jaya PT. Palyja and PT. Thames for 25 years.

The purpose of this cooperation there are four, namely:

1. Improve efficiency
2. Improve the performance of PAM Jaya employees employed in the Partners and employees of PAM Jaya
3. Improving the ability of technology and good management for PAM Jaya or for Partners
4. Improving the quality of service following water quality standards of production and distribution, and maintain continuity and balance water supply.

The existence of cooperation with two private partners, so then the role of PAM Jaya only serves as Regulator Body. It has implications for organizational streamlining, change the function of the elements of organizational and operational changes to SOPs and regulations. Forms of cooperation with Partners is a concession in the form of exclusive rights management for 25 years. PAM Jaya cooperation agreement with the Options are starting from manufacturing to distribution and customer billing is done by PAM Jaya Mitra namely by PT. Palyja and PT. Aetra [16].

It is expected from this cooperation, the private sector can bring a new fund to manage efficiently and accelerate development, Pam Jaya can improve performance by better service and water tariffs are still affordable by the people of Jakarta. With the cooperation of Public Private Partnership, then PAM Jaya Jakarta main task is to conduct activities related to the supervision of private partners in the provision and distribution of drinking water. This means that all the planning is done by PAM Jaya and operational stages performed entirely by the private partner.

The purpose of this study was to analyze public private partnership PAM Jaya with the private sector conducted from 1998 to 2012 in an effort to increase the quantity and quality of water supply to the people of Jakarta.

## 1.1. Public private partnerships (PPPs)

One form of private partnership in the field of public services are privatized and one of its forms according E. Savas is a Public -Private Partnership abbreviated PPPs formed with the aim to support the provision of infrastructure, community facilities and public services are concerned. Characteristics of such cooperation is the share of capital, risk, responsibility and results. The role of government in this case, just as the referrer instead of punting, where the government has only set of rules and controls, while exercising is the private sector. In line with this thinking is the opinion expressed by Savas (1987) "*privatization is the act of reducing the role of government or increase the role of private sector, in achieving or the ownership of assets* "

Although Private companies generally look for benefits (profits taken), but the government through careful study establishes rules do not provide excessive profits to the private sector. In other words, the rules made less harmful to society, as well as the private sector are not too favorable. The government's role as a mediator between the private and public sectors. The private sector which handles government affairs remain under the control of government and society. The government controls based on what has been defined while, community control over what he felt on the performance of efficiently when compared to those handled by the government. Many governments are currently trying to privatize state-owned companies as well as company -owned areas that relate to the public interest. "The government is very interested in the success of the various entities in the community for these enterprises will be a reception for the area" according Siagian (2007). According Sembel (1998) "Broadly speaking, the reasons supporting the privatization can be categorized into three groups: the efficient cause, the reason for the concentration of business and other reasons".

The concept of private partnership with the government (Public Private partnerships) appears to prevent slowness of service provided to the public by the government as well as improve the efficiency and effectiveness of services. The factors above, which is an encouragement and consideration for the government to divert public affairs to the private sector so the government will be concentrating his attention to matters that are more important. These factors, as well as serve a positive value or benefit of Public Private Partnerships.

Currently, some regions have implemented reform of the public sector by applying the concept of New Public Management. This is because there are some areas that cannot be done by the government. This reform aims to improve the effectiveness and performance of public services which ultimately aims to improve the quality of public

services to the community. Almost all countries now an increased need for quality and quantity of services and infrastructure. Public Private Partnerships is known as one of the ways to improve the infrastructure and efficiency of public services. According to Eugenijus (2008) "Cooperation between this government and the private sector (Public Private Partnerships) became a phenomenon of the New Public Management, which aims to improve public services in an economical, efficient and effective". This is also confirmed by the Hood (1991) that "the goal of the government in an era of new public management to ensure that it will be an increase in public services". According to Van R Johnston (2007), "the purpose of Public Private Partnerships is to raise capital, manage risk more efficiently than the government, and to improve the quality of the product". The benefit of Public Private Partnerships Viktorija (2006) said, "is to strengthen government capacity, innovative solutions, reducing costs and time, the transfer of risk to the private sector, access to expertise, experience and technology". Rui Cunha, (2010) said, "Public Private Partnerships aims to improve the efficiency and the introduction of new services. Public Private Partnerships successful when can improve the quality, quantity, and profit". David Levinson (2006) said that "a successful Public Private Partnerships is to improve quality". Why do cooperation with the private sector in public services according Hua (2000), for "inefficiency and inability of the government, which is the result of doing a monopoly in the field of public services delivery".

Of the various opinions on the above it can be concluded that Public Private Partnerships is intended to improve the ability of government enterprises in the public service both in quality and quantity in a way to raise capital, manage risk more efficiently together. It is expected to do Public Private Partnerships will strengthen government capacity, innovative solutions, reducing costs and time, the transfer of risk to the private sector, access to expertise, experience and technology. In many countries the major public services such as telecommunications, gas, electricity, water and air transport, bus and train have done many Public Private Partnerships in various forms either in the form of mergers, or acquisitions due to the competition. One of the public service is in the field of water supply and private sector

has long been engaged in provision. Also confirmed by Thompson (2001) that "public services such as gas, water, have long conducted Public Private Partnerships". Several studies examined the provision of clean water in large cities conducted by private parties such as in Scandinavia by Carsten Greve (2003), Osmo Seppala and Jarmo T. J. Hukka (2001), in Africa by Maureen A. Lewis and Ted R. Miller. When the government in

cooperation with the private sector, it does not mean the government's responsibility towards public affairs is over, but the responsibility still rests with the government.

## 2. Models of Privatization

Classification forms of privatization according to Savas (2000) there are three groupings of privatization of government in running the service function and also the ownership of companies and assets, namely:

1. The delegation, that the government still has a responsibility, but to invite the private sector in public service delivery. Consisting of Contract, Public Private competition, Franchise, Public Private Partnership, Grant, Loan, Tax Favored status, Vouchers, Mandate.
2. Divestment, governments discharge of their responsibilities.
3. Displacement, the private sector grow and take over the government's activities.

In this study specifically discusses one of Delegation, privatization, namely: **Public-Private Partnerships (PPPs)**.

Enhanced infrastructure development projects through public-private partnerships (PPPs). PPPs interpreted to be an arrangement in which the government requires capital incentives, the need for infrastructure with the life of the long-term, and a combination of financing the construction of desired facilities between government and the private sector (most of the costs are usually financed by the private sector) and then the implementation of the operations by private franchise system run long, cooperation or leasing contract. PPPs are types of cooperation projects building roads, airports, water supply system, construction of power plants, the operational organization of prisons, sports stadiums, education, and government buildings were also developed by the method of PPPs as urban economic development program.

### 2.1. Cooperation according to Harrison

According to Harrison (1994: 189) definition of a strategic alliance (Strategic alliances) "is a collaboration of 2 or more companies to develop new products or services, enter new markets, increase resources or converting process. The form of strategic alliance for Joint ventures is a special type of strategic alliance is when two companies share a balanced position in the new company and Partnership; two or more owners of the

company manage the office operational and responsibility with a balanced position in the activities and finances of the organization.

Kanter in Thompson (2001) suggested determinant of the success of cooperation, namely:

- This cooperation should be strategically important to both parties.
- This cooperation is complementary rather than mutually competence.
- Disclosure of information in both parties
- Should this cooperation lead to true integration despite the association of different cultures. Mutual trust is the main thing.
- The setting should be an institution that can demonstrate a clear identity and position.

### 3. Methodology

This research is descriptive research with a qualitative approach that aims to accurately depict or describe something happening and going on. McNabb (2002: 267) said "that qualitative research is a series of non-statistical research techniques and processes used for the collection of data on social phenomena". It's hoped the research could clearly and accurately describe the subject matter of this research, the problem of whether the implementation of the Public Private Partnership Pam Jaya with private partners in the provision of clean water to the people the city can achieve the objectives of cooperation. This research was conducted from 2010 to 2012. The collection of data in this research is done by several observations, documentation and interview with some informants consist of: 5 Senior Managers PAM Jaya, 10 Managers PAM Jaya and 20 represent customers PAM Jaya (Dormitory, Apartment, Households, Small industries, Flats, Buildings, and Social Institutions).

### 4. Result

PAM Jaya tries to achieve its vision and mission, which is to distribute clean water to the entire community of Jakarta, providing clean water services running 24 hours with water quality in accordance with the Minister of Health Minister Regulation no.46 in 1990. But in reality until 2012, water distribution is done by PAM Jaya does not include all the people of Jakarta.

One of the main objectives of public private partnerships regional company PAM Jaya is to increase the quantity and quality of water, by expanding the coverage of water supply services to the community. In 2011 after the privatization has been running 12 years, the coverage of new services by 62, 75% to be exact only able to serve a total population of 5,614,632 inhabitants of Jakarta as much as 8.94691 million inhabitants. This means there are as many as 3,331,678 inhabitants of Jakarta, or 37.25% of the population of Jakarta is not got clean water services. In 2009, production capacity reached only 265 777 851 m<sup>3</sup> or 63.82% of its production target.

Clean water from PAM Jaya is often not flowing 24 hours as promised, even does not flow at all. Informant from Apartment said "water debit is very small, the needs of 800 m<sup>3</sup>, 600 m<sup>3</sup> supplied. does not match the promise". A House hold said "water flows only midnight, so troublesome" and informant from Flat said "when there is interference, the water does not flow, but without prior notice from PAM Jaya officer" Customers have another source of clean water from the pump.

Most of the customers doubt the quality of water from PAM Jaya, PAM Jaya customers use water only for washing, bathing, while for most of the drinking water needs to switch to bottled water. Informant from Social Institution said "clean water from PAM helpful, but not sure of its quality, for drinking from bottled water". Public complaints about increasingly difficult to get clean water became a problem that cannot be overcome by PAM Jaya. On the one hand, the public demand for clean water is increasing, but the quality of services provided is not comparable with the public demand fulfillment. In general, in 2008 of 79 954 complaints received, only 66 525 cases or 83.20% of which can be completed. So that happened in 2009 was of 66 517 complaints that in only 66 517 cases or 81.69%, which can be completed. Of the six types of most customer complaints are complaints about the water off / do not get out as much as 64.26% which is the second most complaints leaking pipe as much as 15.42%. Data customer complaints Pam Jaya that accommodated through the website Pam Jaya, some customers still expressed dissatisfaction with the services Pam Jaya such as slow response to the problem, it is also about the quality of water that is not according to standards such as the level of turbidity (turbidity) reached 20,000 NTU of usually less than 100 NTU (Pam Jaya's website, February 14, 2010).

Pursuant to Regulation no.46 of 1990 the Minister of Health and no 907 of Minister of Health Decree in 2002 concerning requirements and supervision of drinking water quality, that water quality received by customers must have in the quality of drinking water. This means water quality should receive by customers is feasible and can be drunk directly because there are no bacteria or content of dangerous substances in the



water. In fact, today, only in areas Billy Moon in East Jakarta who can be met the quality standards of drinking water. The actual quality of the water coming out of the IPA (Installation Air Center) PAM Jaya has complied with Drinking water standards, but in the process of distributing water through pipelines to distribution to the customer a lot of contamination, including the pipeline that leaked causing bacteria enter T. Coliform and E. coli that are harmful to health. Because the substances rusty pipes Iron and Manganese in the water exceeded the threshold.

TABLE 1: Customer complaints per type of Complaints in 2008-2009.

No	Complaints	Year (2008)			Year (2009)		
		No of Complaints	No of can be resolved	% Can be resolved	No of Complaints	No of can be resolved	% No of can be resolved
1	Small water / low pressure	3.740	3.084	82,65	3.765	3.185	84,59
2	Water does not flow at all	42.839	39.262	91,65	52.323	48.991	93,63
3	Pipe leak	13.321	12.162	91,30	12.559	6.807	54,20
4	Meter recording device (damaged, opaque, inverted)	4.457	2.368	53,13	2.796	1.530	54,72
5	Water quality	4.093	3.779	92,33	3.962	2.832	71,48
6	Note Account	11.504	5.870	51,03	6.025	3.172	52,65
Total		79.954	66.525	83,20	81.430	66.517	81,69

Resource : PAM Jaya Jakarta, 2010

In no.107 Cooperation Agreement of 2001 between PAM Jaya and PT. Aetra and PT. Palyja has been established, that the customers are entitled to water service with continuity of service is 24 hours a day with a standard handling of complaints is 4 hours. In 2009, customer complaints that the water does not flow at all is the type of complaint, include 48 991 or 64.26% compared to other types of complaints. In January 2011, there are 2,336 complaints of water does not flow at all that can be handled within 4 hours and 1,607 complaints of water does not flow entirely new that can be resolved after 4 hours. This means the handling of customer complaints is partly (33%) did not meet the standards of the time of completion. Informant Apartment said "PAM image is good, but the service is slow. Officers came to record only.

In no.107 Cooperation Agreement (PKS) 2001 has been set Pam Jaya employee involvement in the process of work but the fact is not as expected. After a public-private partnership of cooperation in 1998, the main task of PAM Jakarta is planning and overseeing the implementation of the plan carried out by the private partners,

namely PT. Palyja and PT. Aetra in the supply and distribution of drinking water. This means the operational stages performed entirely by the private partner. But PAM Jaya set nonetheless remain PAM employee involvement in these private partners by setting conditions of employees in the total composition is a 50% partner PAM Jaya employees were called supporting employees (second date), and 50% of private sector employees. It is intended that the operational process is still running as the primary mission of PAM as a local company that should be serving the public so not solely serve the interests of private profit-oriented. In fact, today the composition of the private partner is only 20% of employees PAM and the remaining 80% of employees of private partners. In a structural position PAM Jaya employee involvement in private is not balanced especially in PT. Palyja where all officials at headquarters and head of the Regional Service Unit Palyja / UPP is completely private person while in the PT. Aetra structural officials at the headquarters of all private persons but some officials Regional Head of this level with Division Head at PT. Aetra partially occupied by the PAM Jaya.

Cooperation Agreement (PKS) defines the components of Water Charge means the charge payable to Partners in exchange for cooperation every 6 months, adjusted for economic conditions such as inflation, and others. Rates since 2007 there is no increase, while the increase in water charge is done routinely per 6 months, resulting in a deficit (Short fall) accumulated until the year 2011 the deficit is very large. This cooperation, from the financial side only consider the interests of the private partner in order to always benefit when in fact the financial capacity of the PAM Jaya insufficient.

Water charge projected IRR (Internal Rate of Return) means the amount of refund that will be received for their investment. In 1998 when the bank rate of 18%, then the IRR rate is set to remain at 22% over the 25-year agreement, the amount of IRR should be adapted to other conditions such huge interest rates, inflation and others. As an example of the rates in the years 2010-2011: amounted to 12-15%.

There has been no significant transfer of technology derived from PT. Palyja and PT. Aetra to PAM Jaya, if there is only a simple example of technology transfer to detect a gas leak is no longer done manually as before is to dig a network that often interfere with other parties, especially the smooth transportation. Now it has conducted leak detection using helium gas that does not need to unpack all the pipes but only at certain points and with a diameter smaller excavation.

## 5. Conclusion

In the implementation of public private partnership cooperation PAM Jaya with 2 private partners (PT. Palyja and PT. Aetra) with a system of concessions for 25 years, has been running 12 years (1998-2012), but the coverage of water services for residents of Jakarta only reached 62, 75%. PAM Jaya water quality received by customers not in the quality of drinking water. Management of initial production to distribution controlled entirely by the private partner. Many provisions of the treaty clauses Cooperation (MCC) only in favor of one party, in this case the benefit of private parties. Ratio of PAM Jaya employees are seconded employee and partner employees who are not in accordance with provisions of 80%: 20%. The failure to transfer of technology or knowledge from partners to PAM. IRR (Investment Rate of Return) of 22% over the 25 years that are flat are not adapted to the macro-economic conditions Cooperation public private partnership undertaken PAM Jaya to the private partner does not improve the quality and quantity of fresh water to the customer because it is not done optimally.

To overcome this injustice has been done Re-Balancing Contract for the years 2011-2015, so expect the cooperation of public private partnership with PT. Aetra PAM Jaya and PT. Palyja will be more effective, accountable and transparent.

## References

- [1] Bhuiyan Shahjahan. 2005. Public Private Partnership for Sustainable Urban Solid Waste Management in Bangladesh, Kazakhstan Institute of Management, Economics and Strategic Research (KIMEP). Kazakhstan.
- [2] Biswas Asit, Cecilia Tortajada. 2005. Water Pricing and Public Private Partnership. London: Routledge Group.
- [3] Benlow, David, Ian Scott. 1983. Fighting Privatisation: The Struggle for Wandsworth. NUPE/IWC Pamphlet.
- [4] Bradford, Neil. 2003. Public-Private Partnership? Shifting Paradigms of Economic Governance in Ontario. Ontario: *Canadian Journal of Political Science* Vol 36 No 5 Dec.
- [5] Burgelman Robert A. 1996. A Process Model of Strategic Business Exit, Implications for Evolutionary Perspective on Strategy. *Strategic Management Journal*, volume 17 (p: 193-214).
- [6] Cunha Rui and Sanford v Berg. 2010. Public-Private, Partnership Contracts: A Tale of Two Cities with Different Contractual Arrangements. Working Paper.

- [7] Eugenijus Skietrys, Alvydas Raipa, Edverdas Vaclovas Bartkus. 2008. Dimensions of the Efficiency of Public - Private Partnership, *Engineering Economics*. 2008. No 3 (58).
- [8] Garg Ankur, Varun Kumar and Vaibhav Verma. 2007. Public Private Partnership for Solid Waste Management in Delhi, a Case Study. Delhi
- [9] Greve, Carsten. 2003. Public Private Partnership in Scandinavia. *International Public Management Review* Volume 4-issue 2-2003.
- [10] Hood Christopher. 1995. The New Public Management in the 1980's Variations on A Theme. London: *Accounting Organization and Society*, Vol. 20 No. 2/3.
- [11] Ikhsan. M and Makhdun Priyatno. 2001. Privatisasi Public Company. Jakarta: STIA LAN.
- [12] Kumar Sasi. 2004. Public Private Partnership in Urban Infrastructure, Kerala Calling Feb.
- [13] Lewis Mureen and Ted R. Miller. 2000. Public Private Partnership in Water Supply and Sanitation in Sub Saharan Africa., Washington DC: The Urban Institute USA.
- [14] Levinson David. 2006. A Framework for Assessing Public Private Partnerships.UK: Edward Elgar Publisher.
- [15] Lukman, Sampara. 1999. Quality Management Services. Jakarta: STIA LAN Press.
- [16] Rizal Syamsu. 2008. Rights on the State's Water Resources Associated with Privatisation of Water Management in Indonesia. Dissertation. Doctoral Studies Program of Legal Studies, UNPAD Bandung.
- [17] Savas E.S. 1987. Privatization, The Key to Better Government. New Jersey: Chatam House Publisher.Inc
- [18] Savas.E.S. 2000. Privatization and Public-Private Partnerships. New York: CQ Press.
- [19] Savas, E.S. 2005. Privatization in the City, Successful, Failures and Lessons. Washington DC: CQ Press.
- [20] Sembel Roy. H.M. 1998. Privatisasi State-Owned Enterprises (BUMN) in Indonesia. Jakarta: Penebar Swadaya Press.
- [21] Osmo T Sepalal, Jarno Hukka. 2001. Public Private Partnership in Water and Sewerage Services Privatization for Profit or Improvement of Service and Performance. *Public Works Management and Policy* vol. 6 No.1.
- [22] United Nations Economic and Social Council, 2005, Public Private Partnership For service Delivery: Water and Sanitation. Addis Ababa : Ethiopia Paper, Third Meeting of the Committee on Human De Development.

- [23] Victorija Bojovic. 2006. Public Private Partnership as a Last Resort for Traditional Public Procurement, *Panoeconomicus* 3, (p.299-311).
- [24] Wackerbauer. 2005. The Regulation and Privatization of the Public Water Supply and the Resulting Competitive Effect, Munich Research Report.
- [25] Walker, James L. 1995. Service Encounter satisfaction: conceptualized. *Journal of Services Marketing* Vol.9, No. 1, p. 5-14.
- [26] Zakharova Str. 2007. Public Private Partnership. Belarus, <http://research.by/>