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### Management Evaluation of Residues Separation of Origin by Planning Method on Municipality in Tehran (Case Study: Zone 16), Iran

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**ABSTRACT:** The main parts of residues strategy in every country is including politic and planning in the case of different manage mental elements such as culture and training reserving systems collecting carrying and bury the materials especially cases such as less production (minimization) and problem that is always important which it means recovered things from production origin. It should be considered as an appropriate technology with regard to biological situation in every country. This research also is about the amount of citizen's participation on residues Separation from origin and monumental planning to separate the residues from origin on zone 16. The used method in this research is measurement (quality and quantity kind) and documentary study (document view on progressive work on zone 16). As it has shown in this search statistical cases are included residential citizens on the zone. Case volume also with regard to the earned number from courante formula is about 384 that to prevent eventual errors it used number 400. Sampling was regular accidentally. In this research it was studied the amount of citizens participation role of training on citizens participate to separate residues from origin as research hypothesis. Everything hypothesis in the search were confirmed. Finally the search has shown solutions for more participation of citizens and manages mental planning to have progress on residues separation.



Keywords: Residue, Management of Residual Materials, Urban Planning, Stable Development on City, Participation of Citizens

#### INTRODUCTION

One of the most important difficulties about citizenship is rubbish production .to solve this problem we should find a method and return this materials to production cycle with suitable ways. Otherwise we encounter with biological difficulties new future. Currently Tehran city produce 8000 Tonnes rubbish daily and about 2.5 million of Tones rubbish every year that in these amounts with regard to accomplished analysis there is about 70-75% compostable materials (wet rubbish) 20-25% dry and recoverable materials and 5-10% of other superfluous articles. With separating these materials from origin we help to salvage and hygienic remove of them and preventing from contamination and destroying national capitals (Oven, 2002).

Since today we encounter with a lot of problems and difficulties to preserve biological environment therefore produced residues from different activities of people have the main share in this part that is included new dimensions per days. Produce usual residues industrial ones especial hospitalized one agricultural and unusual management of these materials making a lot of hygiene problems and biological difficulties in our country management of solid residues that is one of the most important duties of city.

Management on huge cities all over the worlds is carried one of the most complex and expensive problems on city management. Unusual methods of collecting and managing solid residues lead to serious hygienic and biological problems.

Since 2004, law of residues management have been approved on Islamic parliament of Iran therefore special regard to residues management is necessary. To reach this goal we need hard wares such as burial place suitable transportation vehicles and collecting suitable centres for recovery and residues refining. other methods include application managing and planning making informational and supervisory programs and specialized programming that without them we cannot have a concrete system of residues management that these earned by using management software's (Havidi, 2011).

Recognition consideration analysing and assessment of past experiences and their conformity with current management methods of solid superfluous according to social economical technical biological and hygienic point of view following managerial regards on August 83 result in recognizing positive and negative points of different methods and preparing suitable patterns with good view on residues management and emphasize on culture-making and promoting the degree of social information and using peoples habits and views. This work appoint the recovery and conversion material organization until on every one of these regions with regard to related characteristics began to doing "solid superfluous separation "model from origin.

Advising people from social economical and biological effects of their participation on cavils residue

management could decrease its economic costs as far as possible and this point cause more participation of them. People s cooperation on "separation process from origin "will have a lot of economical profits for private parts and public management (Hashemi, 2011). With regard to these points working – places for rubbish s separation will build on different parts of municipality which is accompanied by management of solid residues.

The Goals of this work are included:

-Protection of human and society s safety and hygiene.

-Guardian ship of biological environment and stability.

-Increase economic output support of development and progress (industrials economic and social).

-Making employment.

-With due attention to increasing rubbish production on municipality zone 16 crowded residential parts in this region and also different difficulties about biology in this region makes difficult to help people in this part. Different methods among different cities and also different parts of Tehran have been presented until make promotion on superfluous management.

Since program success have main relation to the recognition of all factors which effect on residues management or on the words related to determining strength and weakness points (internal factors) and chances or threats (external factors); therefore in current research we study about gathering dry residue in the region with regard to present conditions of production. Then we give appropriate strategy to make progress on residue s management system.

With due attention to geographical position of this zone that mentioned before in this search we try to present different methods which could promote the culture of residues separation from origin and have right planning to decrease the amount of rubbish in this zone and have best use of residues separation from origin of rubbishes .

By doing this work we can help to preserve biological environment and to reach stable progress in the city. Total solid residues which produced on zone 16 were about 1122 Tones on 2011. With regard to high production of rubbish on zone 16 and crowded residential commercial and industrial texture this research find necessity to programming residues separation from origin in this zone. Residues separation from origin is one of the proceeding techniques to increase the effect of residues recovery (effective document zone 16). In this research researcher want to answer some important questions. In principal reach to answers to these questions make busy the mind of researcher and he/she tries to reach final goal.

What will be the true strategy of management to separate residue on zone 16? How we can attract the urban participation to decrease production and separation of residue? What methods we can produce to promote the culture of residues separation from origin along the region? What will be the proper planning of management to reduce the amount of rubbish production?

#### Importance and necessity of research

All of the organizations that make relation with civilians before each actions need logical assessment of goals until accordingly along with planning step toward certainty of goals. Also municipality as a social structure that has a direct and permanent relation with civilians should have a logical assessment of environmental social and cultural results before every project execution until according to planning with goal reach its target.

Urban development population growth and changes on life's methods such as consume methods for civilians making a lot of problems and difficulties that are unavoidable to comfort them and share of big cities from civil life are more than villages and small towns. Big city Tehran has geographical spreading and population growth that will faces a lot of difficulties. The most important ones is daily growth of rubbish production that is as a serious threat endanger the society health ; whereas businessman don't care to urban work we will have unavoidable biological disasters. On the last year (2010) Tehran's civilians produced about 8 thousand tons rubbishes and this amount is increasing. Methods of biological characters on cities are parts of management methods and directing cities and big cities. In fact if direction of cities is determined and describe correctly a lot of difficulties of biological cases on cities and big cities will be reduced. With regard to sudden spread of portions and communities that may exposed to effects and results of doing this project assessment of social part is necessary.

More over key cases that usually followed by negative social results on progression plans are included:

1- Population changes; such as size and from of population crowding temporary of working power or unprofessional users (disorder on stable and small parts) and immigrate to new places.

2- Economic changes; such as change on new patterns of employment income and institutions investment (long-term marginal note old habitant places).

3- Environmental changes; such as change on ground usefulness natural existence places and regimes that are related to water (loss and decrease of sources for living mongo societies which rely on them).

4- Traditional changes; such as change on local structure or traditional management.

Basic kind of social issues which are related to changes earned from projects are classified to 5 categories connected to each other:

1- Life style issues- method of social life style on daily life;

2- Cultural issues- joint customs commitments value language religious believers and other facts that separated tribal and social groups from each other;

3-Social issues- foundation services voluntarily organizations active and related systems;

4-Resting Issues/Life quality-sense of place aesthetics and in heritance sense of relationship security and making habitant future eagerness;

5-Hygienic issues-psychical physical and social public health; mentioned subjects evaluated the hygienic results (HIA) (Glitch and Salarvand, 2009).

#### **Research hypothesis**

1- It seems that there is a relationship between civilian's cooperation and manage mental planning of residues separation on the zone.

2- It seems that there is a relationship between training and giving information with manage mental planning of residues separation on the zone.

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4-It seems that there is a relationship between improving consumes method and management planning of residues separation on the zone.

5-It seems that women have main role on residues separation from origin on the zone.

6-It seems that unpublic organizations have key role on separation of residues from origin on the zone.

Study books essays hisses research models and internet resources with Persian and Latin language about civil planning and residues separation and protection of environment and reach to stable progress shows that little searches have been done in this case. For example a research with title "training role on separation and recovery plastics and pat on zone 14" has been done by hale Mansoura in Iran which case study is related to zone 2. Results of this search shows that since zone 14 is one of the most important zones in Tehran and also have old civil texture it has been tried to solve

Collection problems and residues repel comprehensively by using of concrete planning and management to training separation from origin and decrease rubbish by recovery trainers.

Region 2 of zone 14 on Tehran municipality have the most wide (8.392 hectare) most population (145000 people) most family members (35.500) and most number of commercial centers(more than 5100) among 6 regions of this zone and this trainings have been done on the zone correctly with a good plan. There is no doubt that training about rubbish separation process have key role on recovery level among civilians. Presented statistics show this matter correctly .method of study in this search is statistical results and current information on recovery administration of zone 14 and deep interview with managers.

Researches about this matter have been done: study about the role of civics training to increase separation of dry residue from origin (produced by: Samba Raze Sultana) study about the role of advertisement on better management of superfluous on municipality of Tehran zones and study about solid residues on cities and economical assessment on zone 11 of Tehran municipality.

#### **Review of Literature**

From Paul's view urban managers have main role on occupation of rare resources and spread civic facilities separately. According to this point of view to making clear unequal chances of life it is necessary to emphasize on causes of self- power about delusion – making to control resources and accessible facilities.

Rex and moor view: These scholars by using Weber and Berets views try to show new comments which are totally studied about rare resources on city and reach them among social groups such as urban ground and capital facilities.

From weber point of view societies growth and development and Brocratic organizations will affect collective be saviour and a good organization is one that regard to the relation between organization and humans. Power structure on social life has importance in different parts. Management on the basis of power structure if it has legitimation and it built at first will have high social effects.

### Theoretical classification of urban development views

Injured views: stable progress in this idea looks at natural resources as a capital and tries to use of maximum work.

Weak stable development: In this idea it follows valuable goal and this goal is "investment growth combine with natural works." Along this goal points are studied and have shown that neoclassic economical bases could use to solve environmental problems. Necessity for political goals in this case is economic growth. But during this work environment expenses are important.

Strong stable development: followers of this idea show that precondition for every economic development is environment protection.

Ideal model: developing ideal model included stable development of deep idea which its goal is changing society construction economy and politic. Totally parts of this system are arranging so that improve human behaviour relative to environment and nature. For this reason this idea also is called ecologist idea.

### Theoretical framework of research

Characteristics of stable city from "paternal view"

In "Patter Hall" idea a stable city has these characteristics:

1- Existence of urban stable economy so that weal is divided between civics righteously.

2- Urban cooperation and correlation and none xistance of separated and local places.

3- Urban stable residence that it means suitable houses for all people.

4- Achievable civil facilities for all civics.

5- City has good relation with stable biological environment.

6- Urban stable life that it means an active and alive city.

7- Being civility and people s interference on civil planning and managing.

#### MATERIAL AND METHODS

The used method in this research is measurement and its kind is descriptive and clearing. In the case of time criterion this is in erupted kind and in the case of deep structure is width looking that its inputs are gathered by questionnaire and interview (quality and quantity). Except the measurement current documental study on zone 16 has completed the method of search and civics cooperation on residues separation from origin.

The questionnaire of research is considered to residues separation management from origin on zone 16 in Tehran. With regard to the population in this zone 384 questionnaires is provided; But with regard to eventual errors in questionnaires 400 questionnaires will be distributed among people.

#### Method of input processing

After using questionnaire stage of input processing and evaluating will be done. With inputs coding stage of

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inputs entry will began. The coded inputs with the purpose of analysing and describing changes enter SPSS software. Statistical groups are included in habitant and employed civics on zone 16 and method of sampling is regular accidentally.

#### **Description of changers**

Seven changers in this part included: the amount of civics activities on rubbish's separation, amount of civics activities on rubbish's separation, amount of civics information about different aspects of rubbish's separation, receive facilities by civics, civics access to these facilities, activities, works and encourages to accelerate rubbishes separation and finally, people's evolution of manager's work and related organization.

#### Civics activity on rubbish separation

Number of people who help to separate rubbish (48.5 %) is equal to people who do not this work (%51.5). This problem shows that importance and necessity of separation from origin is unknown yet.

#### Kind of activities on separation of rubbish

Civics activity is limited to two works: separation of rubbish and delivery to collection machines that among these cases considerable number of answers it means 98.6% of rubbish were packed on their house separately.

#### Amount of in formation

Success of projects on separating from origin need to recognize people's socio-economic positions (as producers of solid super blouses) and present training methods according to their needs. On doing successful work of separation from origin producers cooperation such as in habitant centres commercial places ant etc. is very important. Therefore, proper and specialized training have an important role on these projects success. Amount of Information is a case that study about the civics information such as importance facilities and encouragement of rubbish's separation organization and dry and recovered rubbishes.

Information about importance: 61.9% of repliers put very much importance for rubbish separation and this is high number against people who have have very little and little information (4.9%) about this matter and its importance.

Information about the organization which works on rubbish separation: Nearly majority of repliers were aware of organization of rubbish separation. 96% of repliers know municipality responsible to separate rubbish.

Information about received facilities by organization of rubbish separation: repliers have very little information about received facilities and higher present is related to (unawareness) that shows unadjustment the civics. Therefore the most awareness is about (delivery the rubbish bag) with 48.3% and the less awareness is about (store of rubbish separation) with 17.5%.

Information about encouragers by recovery organization and municipality: Recovery booths were established from last years on Tehran's zones with the purpose of promotion and development of rubbish separation culture between civics and make clear the environment from unrecovered rubbishes.

These booths are seen at some parts of North East – North and squares of fresh fruits and vegetables in Tehran and when they give dry residues can receive cleaning powders goods papers such as paper to purchase flower and plants or stationaries. Among repliers information about encouragement is very low and only little present of them have information about this advantages. About all three encouragers population about 50–60 number of all statistical society have awareness that it is very low.

Information about dry rubbishes: Training kind and its parts on rubbish separation of different countries depends on kind and goal of model. For example if model goal was producing compost from city's rubbish (such as Tehran) civics are asked to separate rubbishes. Into two parts; (decayed or wet rubbishes) and (undecided or dry rubbishes) and they must give advises about each proofs. In continue we will have classification and proofs of dry and wet rubbishes. Dry residues such as:

1-Paper and pasteboard 2-Plastic 3-Metals 4-Glass 5-Wood Wet residues such as: 1-Food residues 2-Fruits and vegetables

Most repliers have true information about dry residues proof. 93% of civics knows glass and manorial water bottles and also 95% of civics know plastic materials as dry rubbish proofs. There is some doubt about this matter that food residue is regarded as a dry or wet rubbishes. 12% of repliers know it as dry rubbish's proofs and 2.4% expressing unawareness.

Information proof of recoverable rubbishes: the materials which usually are recovered including:

Scrap ironware's plastic glass paper and pasteboard and some chemical material of rubbish that change to compost. There is more agreement that paper glass and woody pieces are recovered materials. Also most replier's dungaree that Kitchen residue is returnable that show repliers have true information. It seems that there is more doubt about bread battery and textiles because half of repliers know them recoverable and other half know them unrecoverable or express unawareness.

Amount of Information about proof of dry and recoverable rubbish: 97.6% of repliers had high awareness of dry rubbishes proof against 72.5% had high awareness about recoverable rubbishes proofs. Therefore since the amount of awareness is high in two cases also information about dry rubbishes is comprehensive.

#### Amount of civics inclination

Since high present of expenses from rubbishes recovery is related to their gathering therefore civics are effective to decrease such an expense. Rubbish separation from houses could have a big help to recovery model. In this way inclination familiarity their needs and wants have special importance.

Amounts of civics request to cooperation with related centre to do works about rubbish's separation:

Amount of civics request to cooperation with related centre to do work about rubbish's separation:

Amount of civics inclination were measured on three parts:

Civics inclination is relatively higher only about "rubbish's separation"

Percept of repliers were mentioned very high inclination against 7.6% of them that haven't any inclination about (distribution of training brusher) and 20.5% hadn't no inclination .Inclination to (people awareness) is more less than first two cases. Higher present it means 23.8% related to the persons who had no request to do this work. As a result amount of civics inclination place on low level. Request of women and men cooperation were low on two sexes. Since women especially hawse keeping women could play more effective role on recovery part it was expected that they were being more active than men. Reason of this result is unsuitable planning. In fact shortage of giving information and good training and aside this nonexistence of facilities such as rubbish packets special stores for separation etc. will lower the civics inclination and cooperation. With regard to last findings that show high information of repliers it seems that not existence of facilities is one of the most important reasons that this model is unsuccessful.

### Reasons of civics uninclination to separate rubbish

Now we study about reasons of inclination from civics side. These reasons are divided to six parts: (unavailable proper machines for collecting rubbish or Conexus for rubbish delivery); this part have most abundance and with 48.2 % is the most important reason of inclination from civics side to separate rubbishes. After it orderly (irresponsibility 36.4%) (Lack of facilities 33.1%) (Insufficient information 31.6%) (High employment 15.4%) and (high – troubling 11%) are other reasons of civics inclination.

Civics access to facilities: civics accesses to the facilities that facilitate recovery work are limit. This is the most important reason of non-advancement of this model among civics. 71% of repliers don't access.

To special bags for rubbish separation 82.6 % to store or cone and 80.2% to regular gathering of rubbishes by recovery organization.

#### **Civics profit from giving facilities**

Profit from training activities produced by related organization: Totally the amount of profit from all training facilities was being very low. Especially on three cases: (trainer in front of house door) (trainer on public places) and (exhibition) that at all three cases 80% or more of repliers mentioned that don't seen anything. But this position is better on television (lecture ant teaser) and on two cases 20% of repliers profit (very high).

Although this is not high number but is more comprehensive than other cases. Position of (radio programs) (newspaper subjects) and (brusher and banner) is low average.

It means also numbers are divided between 6- parts But more emphasize is on down of spectrum that shows (very little and never). Meanwhile it seems that civics don't profit from training facilities according to separation goals and rubbish recovery.

Amount of civics profit from giving facilities to separate rubbish: Half of repliers received profit from (rubbish bag) and (machine with special bell) and other half don't receive profit. But amount of profitability from (fixed cone) and (special store to collecting rubbish) have been very low. Only 30% of repliers have accessed to cone and 18.8 % of them to store of colleting rubbish. Amount of civics profit from encouragers to attract people's attention to rubbish separation (if they have information): Amount of encouragers were being very low and about every three cases means: cleaning powder stationary and recovery cards only less than 20% received profit.

#### Activities facilities and proposed encourages from people to each other and related office to accelerate rubbish separation

People suggestion to organization of rubbish separation: Most requests of people are related to separate stores for different kinds of rubbish (45.7%) and also collecting rubbishes on time (41.3%). Since the receiving centres for rubbish are not comprehensive galitively and people should take rubbish to these centres and spend their time and energy these were not accept and only 16.4% of repliers suggest expanding these centres. Because houses are one of the most important centres for recovered materials therefore giving on time services could be more effective and after that people information and intellectual and material encouragers help to facilitate rubbish separation from origin . Also 35.3% of repliers suggest increasing people awareness and their training. Suggested activities of people to civics to being success on rubbish separation: Half of repliers don't answer to this question and among remained 50 present 31.9% of civics encourages separating rubbishes from their houses.

#### **RESULTS AND DISCUSSION**

Civics evaluation of activities has done with organization of rubbish separation (if it is profitable): (rubbish bags delivery) was mentioned as a weakest activity on this organization and after that (fixed cone) is placed with 47 % of weakness. Whereas (machine with special bell) have more positive assessment. Other cases have a lot of spreading that are not good or not bad.

Civics numbering to municipality for rubbish separation: 48.2 % of repliers describe municipality action with very good and good mark and 27.4 % numbered weak and very weak.

Since the presents on two sides of spectrum (very good and very weak) are equal and is 15 %. Totally we can say municipality action is evaluated average to up.

Civics evolution of municipality s action as compared with past: 15.3% announced its action very better and only 1.3% announced it very lower than the past. 71.5% evaluates its action as very good and good mark.

Civics evolution of present major action: Half of repliers describe present major action very god and good and 13.3 % assessed very weak and weak. Meanwhile action of municipality and present major is assessed well.

# Totalize and summarize the findings with emphasize on impotent points

1- Among repliers people who try to separate rubbishes (48.5 %) in compared with people who don't (51.5%) are almost equal. This problem shows that importance and necessity of rubbish separation from origin for most Tehran Ian civics yet is unknown. But findings showed that people who have more educations their cooperation to separate rubbish is more than others.

2- Information of people about importance of rubbish recovery is very high (61.9 %) and only 4.9 % knows any importance to this problem.

3- Repliers have less information about giving facilities by municipality and most of them don't know that this point is related to insufficient information to civics. Therefore most information is related to (delivery the rubbish bag) with 48.3% and less information is about existence of (special store to separate rubbish) with 17.5%.

4- Among repliers amount of information about encouragers are very low and only little percent of repliers have a wariness of such facilities. About every three encouragers (cleaning powders stationary and recovery cards instead of recoverable materials) about 50-6- people of all statistical society were aware of them that is very low.

5- Most repliers have good information about dry rubbish proofs. 93 % of civics knows glass and mineral water bottles and also 95 % of them know plastic materials as dry rubbishes. It seems there is little doubt about this matter that food residue is part of dry rubbish or not.

6- 72.5 % of repliers have high information about recoverable rubbish proofs. Totally if there is a need to give better information but people information against dry and recoverable rubbish is very high.

7- Amount of civics inclination to have cooperation with recovery organization and municipality in the case of doing works of rubbish separation is very low and only little % of them showed interest to give information toward people about rubbish separation Brusher distribution.

8- Reasons of civics inclination for rubbish separation from origin show that (unavailable special machines for gathering rubbish and Conexus for rubbish delivery) are most important reason for their uninclination and with 48.2 % have the most abundance.

9- Civics accesses to facilities which facilitate recovery work are limited and this is one of the most important reasons of advancement in this model among them. 71 % of repliers haven't access to special bags to separate rubbish 82 % to store or cone 80.2 % to regular gathering of rubbishes with recovery organization and municipality.

10- Totally receiving all kinds of training facilities was being very low especially on every three cases: (trainer in front of house door) (trainer on public places) and (exhibition recovery booth). In every three cases 80 % or more showed unawareness. But position about TV (lecture and teaser) is nearly better and about 20 % of repliers accessed very high on every two cases. Although it is not a high number but it is more comprehensive in compare with other cases. 11- Most requests of people were related to separate stores for different kind of rubbish (45.7 %) and also gathering rubbishes on time (41.3 %). Findings show that primary wishes of civics about collecting rubbishes on time and making separated stores has yet not done and because the houses are one of the most important places for recovered materials therefor it seems that more comprehensive services should be produced.

12- Proposed activities to other civics cause to success the rubbish separation model that separating rubbishes was done on house.

13- (Rubbish bag delivery) was assessed one of the weakest activity on the organization of rubbish separation and municipality and after that (fix cone) with 47 % was assessed a weak case. Since (machine with special bell) have more positive assessment.

14- Since women especially housekeeper women are as group that have more active role about recovery model it was expected that they were more active than men but the amount of women and men cooperation were similar and both were low. If we pronounce women as a goal group it seems that this group needs more training and facilities.

15- 48.2 % of repliers explained municipality's action "very good and good" and 27.4 % answered very weak and weak. Since percent on to two sides of spectrum are (very good and very weak) and it is similar (15%). Totally we can say municipality action has been assessed average to high.

16- People assessment of municipality action against past were being more positive and 71.5 % of repliers assessed municipality action very best and best of past.

17- 54.2 % of repliers explained very well and good the present major action and 13.3 % assessed the action of present major very weak and weak. Meanwhile municipality and present major action is assessed "good".

#### Study about research hypothesis

Study about research hypothesis was done by use of "person correlation test" and "one society average test (one sample t- test).

#### There is a meaningful relationship between civics cooperation and managerial planning of residues separation on the zone.

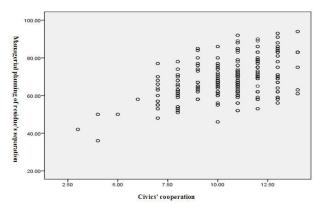
The meaningful degree of test (0.000) is lower than 0.05 therefore with rejected zero supposition and 95 % of assurance can say that there is meaningful relation between two changers. Therefore the mentioned hypothesis is accepted. With regard to being positive the correlation coefficient can say that the relation between two changers is direct it means that with increasing one the other also will increased. Mean awhile if managerial planning has done better will have positive effect on civics cooperation to separate residue and they will have more cooperation on residues separation.

 Table 1. Relation between Civics' cooperation with

 residue's management (source: researcher)

Meaningful surface	Correlation coefficient	Second changer	First changer
0/000	0/448	Managerial planning of residue's separation	Civics' cooperation

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**Figure 1.** Relation between civics cooperation with residue's management (source: researcher)

#### There is meaningful relationship between training and giving information with managerial planning of residues separation on the zone.

The meaningful degree of test (0.000) is lower than 0.05 therefore with rejected zero supposition and 95 % of assurance can say that there is meaningful relation between two changers. Therefore the mentioned hypothesis is accepted. With regard to being positive the correlation coefficient can say that the relationship between two changers is direct it

Means that with increasing one the other also will increase meanwhile if managerial planning has done better advertisement about residues separation has done more on the zone.

Table 2.relationbetweentrainingandgivinginformationwithresidue'smanagement(source:researcher)

	Ieaningful Correlation surface coefficient			Sec	Second changer					First changer			
	0.000 0.507			Managerial planning of residue's separation					Training and givin information				
	80.00-						0		8	8	00	0	0
Manager	70.00-					0	0 80 80	000000	0 00000 000	880 00		0	0
Managerial planning of residue's separation	60.00-			8	0 0 80	800	000 0000 000 000	0 0 0 0000000000 0	8000	00			
of residue's	50.00-		0	8	00 000 O	0 0000000 0	0 0 000	õ	0				
separation	40.00-	0	0	0	80	8	0						
	30.00-	0	0		0								
	20.00-		4.00	6.00		8.00		10.00		12.00		14.00	

**Figure 2.** Relation between training and giving information with residue's management (source: researcher)

#### There is meaningful relationship between correction of consumption pattern and managerial planning of residues separation on the zone

The meaning full degree of test (0.000) is lower than 0.05 therefore with rejected zero supposition and 95 % of assurance can say that there is meaningful relation between two changers. Therefore the mentioned hypothesis is accepted. With regard to being positive the correlation coefficient can say that the relationship between two changers is direct it means that with increasing one the other also will be increased. Meanwhile if managerial planning has done better correction of consumption pattern about residues separation will be done better on the zone.

**Table 3.** relation between improvement of confinedpattern with residue's management (source: researcher)

	<b>Jeaningful</b> surface 0.000		l Correlation coefficient			Second changer					First changer			
			0.632		l	Managerial planning of residue's separation					improvement of confined pattern			
	30.00- 10.00-						0	0 0	Q	0 8 8	0 000000	0 0 00	0000	80 00
mino of	50.00-			8	0 00	00000	0 00 000 00 00	0 00 00000 00 0	00 0000000 0 00	000000000000000000000000000000000000000	000000000000000000000000000000000000000	80	0 0	0 0
sidno's conception	10.00-	0	0 0 8	0 0	8 000	000	000 000	8 0 0	8	8				
	90.00-	000	0											
11	-00.00		4.00		6.00		8.00							
	2.00		4.00						10.00 ed patte		12.00		14.00	

Figure 3. Relation between advertisement with residue's management (source: researcher)

### Women have key role on residues separation from origin on the zone.

There is a meaningful relationship between statistical amount of test and surface equal 22.458 and 0.000 orderly. To assessment it was used t- test. In this test average equal 3 is neutral and ineffectiveness is used.

With regard to this point that meaningful surface is less than 0.05 therefore with rejected zero supposition and 95% of assurance can say that women effect on residues separation from origin on the zone. With regard to this point that two sides of distance are positive therefore we can say that woman is effective on residues separation from origin.

**Table 4.** effect of women role on residue'smanagement (source: researcher)

	surance ace	Meaningfull	Freedom	1 10	average number		
Low degree	High degree	level	degree	statistical(t)	average	number	
0.548	0.653	0.000	399	22.458	3.6	400	

### UN public organizations have key roles on residues separation from origin on the zone.

There is a meaningful relationship between statistical amount of test and surface equal 40.071 and 0.000 orderly. To assessment it was used t- test. In

This test average equal 3 is neutral and ineffectiveness is used. With regard to this point that meaningful surface is less than 0.05 therefore with rejected

Zero supposition and 95% of assurance can say that public organizations affected on residues separation from origin on the zone.

 Table 5. effect of public organization on residue's management (source: researcher)

95% assurance place		Meaning	Freedom	-4-4:-4:1(4)			
Low degree	High degree	full level	degree	statistical(t)	average	number	
0.799	0.881	0.000	399	40.071	3.84	400	

#### CONCLUSION

This research was began with study and "assessment of managerial planning of residues separation from origin on zone 16 in Tehran" which have emphasized on pewter halls idea about civil stable development. The main goal of this research as it is clear from its title was to answer to biological problem from managerial planning point of view in direction to reach civil stable development. Key words are including residues separation from origin civil management and planning civil stable development and biological environment. civil management literature specially municipality organization and its duties also theoretical ideas of civil management were assessed in this research until the reader become familiar with civil affairs and problems and its management at first and then discussed about residues separation from origin and biological problems and also the effects of civil management and biological aspects were measured to reach civil stable development. Patter Hall is one of the most important scholars who works about civil stable development in recent ten years and a lot of researches have done according to his idea.

To answer this question that why we choose the matter of biological effect on resides separation model from origin in direction to civil stable development and also why we use of patter Hall view to clear it there are a lot of reasons which we will refer to some of them:

1-Patter Hall view open a new discussion about stable development and access to it and using of this idea is reckoned research interest.

2-Many works that propound by petter Hall are passing in our society now for example – city with local focus method and city with civics management and also city which are coordinate to nature and ecological environment (Ecologist city).

According to these points we tried to study about civil management subject residue problem and its effect on ecological environment and its role on finding stable development according to patter Hall view in this research while we regard to methodology and other executive work on the search. Also we measured independent changers and dependent ones. In this case we showed related hypothesizes. All these hypothesise were confirmed and were meaningful.

#### **Suggestions and Methods**

## Using different training methods for different goal groups:

1-Public training (using in formed pictures and tableau on the place

2-Install training posters on bwldingboard – inform by using of local newspapers such as local hamshahri and Brooshur distribution – use facilities of making beauty unit. 3-Training directors managers of little cities and blocks and custodians of residential buildings and also face to face training and group training of families in these buildings (using of people on social administration hygiene connectors recovery workers mobilization and council)

4- Training director's employers and custodians on office building by using recovery office workers.

5-Training trade parts cooperate with them and using of legal capacities and trading cooperation.

Using encouragement and persuasion – provocation methods to more cooperation from civics

1-Making ecological competition for civics along with awards.

2-Making painting place along with ecological environment and recovery for children.

3-Making place to build best things from rubbishes especially for house maker women on the local place.

4-Selection good civic monthly and give awards.

5-Making ceremonies and specialized working – places about residues management along the related days with biological problems and recovery work.

6-Member – taking in the group protect from recovery for children.

7-Making musical and happy programs about biological environment (show group and recovery bus)

8- Correlation to make facilities for local managers.

9- Mobilizing recovery garden along the zone and its effect on training the material recovery.

#### REFERENCES

- Alavi Moghaddam Seyed Mohammad Reza study about differences of management about civil solid superfluous on Tehran and Tokyo City (2009)
- Asadi Iraj (2011), civil management and governor- ship. Publication of Art University.
- Asgari Ali (2008), Municipality regulations. City publication institution.
- Azkia Mostafa (2006), Sociology of development Tehran. Publication of word.
- Badran, M. F. and S. M. E. Haggar (2006), optimization of municipal solid waste management in Port Said-Egypt, Waste Management 26, 534-545
- Baghayi Googzeh Elaheh and Mostafa Yousef Elahi (2008), study about rubbish separation model from origin and amount of people cooperation the third national congress of recovery and use aquatic resources on agriculture.
- Bahman Poor Hooman (2005), Study about the effects of civil development on green place of Tehran Thesis of Master of Art Tehran Islamic Azad University.
- Mahram Negad Naser et al. (2002), ecological management publication of ecological protection organization
- Poor Zander Mohammad (2008), pivoted region planning for stable development of civil management Economic word newspaper number 1628.
- Savari Poor Ali (2011), city and province management and growth of intelligence network. City publication institution.

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- Shakiba Moghadam Mohammad (1995), Administration of local governments and municipalities Tehran. Hoor publication.
- Summerized report of statistics about cavils solid superfluous management on (1999), Planning and building office on country ministry
- Theoretical and researchable chapters for residues management (2003), number 1. Publications of municipality organization

www.tehran.ir