

## ENHANCEMENT OF THE SOCIAL DIMENSION IN THE SUSTAINABLE ENVIRONMENT STRATEGY IN IRAQ

*Mukdad Al-Khateeb, Ass. Lecturer,  
Researcher, Environment Research Center,  
University of Technology, Baghdad, IRAQ*

### ABSTRACT

Improving the environment is a mission that should be conducted by three associates; public authorities, environmentalists and the community. The ignorance of environmental education in Iraq has resulted to an almost environmentally illiterate community, demanding well planned programs to raise their environmental; awareness and education. On the other hand, the decision makers should be well informed about the citizens' environmental preferences to be able to set their priorities for the civil services.

Merging the Iraqi citizens in listing their environmental priorities is one of many other approaches for "Environment Education" programs. Globally, such methods have proven to be effective and resulted to widespread understanding, not only for thematic environmental issues but also for cross cutting (socio-economic) matters.

This research is an attempt to illustrate the "Triple Partnership" between; the Iraqi citizens, decision makers and Academics. Also aims at focusing on their collective responsibility towards accomplishing the sustainable environment through an innovated working plan that embraces direct voting.

Regardless of the statistical approach, the (purely randomly chosen) voters have shown overwhelming agreement on particular issues that gave access to an environmental categorization for the related preferences. The women had equal voting chances as were represented by half the total voters.

خلاصة بحث:

"تعزيز الدور المجتمعي في استراتيجية البيئة المستدامة في العراق"

لم تعد برامج تحسين البيئة من مسؤولية المؤسسات الحكومية والمختصين البيئيين لوحدهما، بل بات المجتمع كله مسؤول تجاه تفعيل هذه البرامج وتعزيزها وتحسين كفاءتها لكي يتمكن الجميع من استثمار نتائجها. هكذا هو الحال بالنسبة لمعظم دول العالم والتي تسعى الى تحقيق البيئة المستدامة. حيث عمدت هذه الدول الى اشراك المواطن باعتباره (خلية جسم المجتمع) في تشخيص المشاكل البيئية ومسبباتها وتحديد اولياتها ومن ثم التخطيط لتحبيدها. ان هذه الشراكة بين المؤسسات الحكومية

والمختصين البيئيين من جهة والمواطن من جهة أخرى، لاتلغي باي حال من الاحوال دور الرأي العلمي في تشخيص المشكلة البيئية، بقدر ما تعزز مساهمة الفرد في المجتمع، وبوعي وادراك تامين، في عملية تحسين البيئة لما سيقدمه المواطن باعتباره شريك في التخطيط والتنفيذ باتجاه انجاح مهمة تحسين البيئة. تعدت المفاهيم البيئية سابق عهدها حين كانت مفرداتها مقتصرة على ظواهر متصلة باغلفة الارض الثلاث (الماء والتربة والهواء). فبعد عام 1987، حين صدر تقرير برنتلاند (مستقبلنا المشترك) وتبني الامم المتحدة لهذا التقرير في مؤتمر قمة الارض (ريو 1992) سطع نجم مفهوم جديد، الا وهو ( التنمية المستدامة). ربط تقرير (مستقبلنا المشترك) بين البيئة والمجتمع والاقتصاد وجعل منها مكملات لمنهجية واحدة اطلقت كاستراتيجيات لمعظم دول العالم (استراتيجية التنمية المستدامة). برغم اممية التقرير فانه لم ينكر حق الدول في تبني استراتيجيات خاصة بها. بل وذهبت الكثير من المؤسسات والمناطق او المجمعات السكانية ضمن الدولة الواحدة لوضع استراتيجيات خاصة بها تصب في مجموعها باتجاه تحقيق التنمية المستدامة. تضمنت كل تلك الاستراتيجيات في سياساتها البيئية اشراك المواطنين، وعلى كافة المستويات، في تعزيز هذه الاستراتيجيات من خلال اسهاماتهم في تحديد الاولويات البيئية اعتمادا على حاجاتهم ومتطلباتهم باعتبارهم (ككائن بشري) الهدف المطلق من عملية تحسين البيئة، وعلى اساس كونه المسبب الاساسي للتغيرات البيئية، سلبية كانت ام ايجابية. ذلك كله جعل من المفردات البيئية العصرية، ما يتجاوز كونها متصلة باغلفة الارض الى ما يتصل بالبيئة المحيطة لتنتمثل فيها العوامل والمؤثرات؛ الاجتماعية والتفسيية والسياسية والتعليمية والصحية ومكافحة الفقر والبطالة والتوعية والتنظيف وغيرها من كافة مفردات الحياة اليومية للكائن البشري في عالم اليوم. كان لزاما على الدول التي تسعى الى استدامة البيئة وضع استراتيجية متكاملة بضمنها الانتباه الى دور المواطن في تحقيقها وكان لزاما عليها ايضا زجه في برامج؛ تؤهل الفرد ليكون واعيا لاهمية استدامة البيئة لديمومة حياته والاجيال القادمة معا ومن خلال ادراكه (الواعي) لدوره في التغيرات البيئية بقدر ادراكه لما يمكنه تقديمه لتحسينها. من اجل تحقيق تلك الغاية اصبحت تلك الدول تتسابق في اعداد برامج "التنظيف البيئي"، والتي تركز على؛ تحديد الاولويات البيئية بالنسبة لمجتمع ما ومن ثم زج افرادا من ذلك المجتمع في برامج هدفها تشخيص مشكلة بيئية ما ومن ثم وضع وسائل تحييدها وتوعية الاخرين من المجتمع بكافة جوانبها. تلك البرامج شملت كافة شرائح المجتمع برغم اولوية الاطفال فيها لكونهم اهم فئة تتصل بالحاضر والمستقبل معا.

يتضمن هذا البحث استفتاء شعبي يقصد منه تناول (وصفي وليس احصائي) لمنهجية تتصل بالتالي:  
تتبيه المسفتين الى مفردات بيئية يجدر بهم الاهتمام بها وملاحظتها وتعويد العراقي على خوض هكذا مساهمات مجتمعية المداخل وتنموية المخارج  
استخدام ذات الطريقة (الاستفتاء) في تحديد الاولويات البيئية لمجتمع ما في بحوث ودراسات لاحقة  
تغذية اصحاب القرار بتلك الاولويات لتمكينهم من تحديد اولويات انجاز تحقيق الرفاهية للمواطن.  
تحرى البحث "تعزيز الدور المجتمعي في استراتيجية البيئة المستدامة في العراق" من خلال استحداث  
طريقة عمل متصلة باجراء استفتاء عشوائي بحث (خارج العينة الاحصائية) ، اجري في حزيران 2007 ،  
عن اولويات 32 مفردة بيئية (اساسية ومتداخلة) بالنسبة لعدد متساوي من النساء والرجال في المجتمع  
العراقي (160 رجل و 160 امرأة). لم يكن من المتوقع ان يتفق ( 75-81 ) % من المسفتين على  
اولوية خمسة مفردات بيئية (من بين 32 مفردة) وان يتوافق رأي ( 81 % ) من مجموع المسفتين  
على اولوية مفردة واحدة (تكس النفايات المنزلية) !!!! اكد البحث اهلية العراقيين لتشخيص الظواهر  
البيئية وتحديد اولوياتها بالنسبة اليهم وواقعية تلك الاولويات بالنسبة للمختصين البيئيين. اذ شهدت تلك  
الفترة تكس هائل للنفايات في كافة شوارع وازقة وساحات مدينة بغداد عموما. وما كان اجماعهم على  
تلك الظواهر واولوياتها الا دليلا على وعي العراقيين لما يجب ان تكون عليه بيئتهم وهو ما يؤشر عمق  
ثقافتهم وحضارتهم وبالتالي يبين استعدادهم لتحسين بيئتهم. ادى استخدام هذه الطريقة الى امكانية  
تصنيف المفردات الى مجاميع تبعا لنسب المصوتين. كان للصوت النسائي تميز عكس، في معظم  
الحالات، طبيعة المرأة العراقية في تحسسها الانثوي للمحيط البشري ورعايتها واهتمامها المعهود بالعائلة.  
للبحث اهمية نوعية في جانب التخطيط لمشاريع استراتيجية تهتم استدامة البيئة عموما من خلال رعاية  
راس المال البشري والاجتماعي. حيث ان مثل هذا الاستفتاء وبالمفردات الواردة فيه، يحث العراقيين الى  
التفكير في الارتباط الوثيق بين البيئة والاقتصاد وما يحققه الاثنان معا من خدمات على طريق البناء  
التنموي.  
ان الاولويات التي تحدها مثل هذه الاستفتاءات في حال اجراءها بضمن منطقة جغرافية محددة (حي او  
مدينة) يمكن ان توفر للمسؤولين العراقيين قاعده ميسرة ومهمة في تحديد اولويات المشاريع الخدمية التي  
يحتاجها المواطن وبالتالي تهيئة المناخ المناسب لتنمية بشرية واجتماعية تتطلبها المجمعات السكانية  
المستدامة.

اخيراً، يوصي البحث باعتماد وسيلة الاستفتاء الجماهيري لتحديد الاولويات البيئية في بحوث قادمة يجدر بها ان تكون على مستويات اجتماعية ومناطقية وعلمية محددة (شباب، نساء، طلبة، محلة معينة، زقاق معين ..... الخ)، بحيث يمكن ان تكون مثل هذه البحوث بمثابة انطلاقة لنموذج عصري من "التثقيف البيئي" من خلال:

- 1- اسهام المواطن في تحديد اولوياته البيئية
- 2- تعريف المواطن بالاهتمامات البيئية للباحثين من خلال طرح مفردات بيئية تتصل بالتنمية المستدامة
- 3- تشجيع المواطنين على الامعان في الظواهر المتصلة بالبيئة
- 4- تعود المسؤولين على ممارسات متصلة بالاستفتاءات الشعبية لتحديد اولويات الخدمات الواجب تقديمها للمواطن
- 5- تنبيه المواطن باستحقاقته البيئية ومطالبته المؤسسات الخدمية بتوفيرها له.
- 6- تحقيق الصلة ما بين حاجات المواطن واولويات البحث العلمي وبالتالي انسجام المؤسسات الاكاديمية مع المجتمع.

## INTRODUCTION

Mankind has always been the core interest for all sciences and scientific researches. "It is people that drive social progress, build up social wealth, develop science and technology and, through their hard work, continuously transform the human environment", for that "the protection and improvement of the human environment is a major issue which affects the well-being of peoples and economic development" [1].

Involving the community in listing their environmental priorities enhance the participation of the citizens in decision-making, promote education and public awareness of sustainable development, inform citizens about their impact on the environment and their options for making more sustainable choices [2]. There is no doubt, that such plans should be implemented in communities that are environmentally educated. "Environment Education" is no longer restricted to specialists, literate people or decision makers. "Environmental issues are best handled with the participation of all concerned citizens, at the relevant level. At the national level, each individual shall have appropriate access to information concerning the

*environment that is held by public authorities, including information on hazardous materials and activities in their communities, and the opportunity to participate in decision-making processes. States shall facilitate and encourage public awareness and participation by making information widely available. Effective access to judicial and administrative proceedings, including redress and remedy, shall be provided" [3].*

Effective environmental education can provide individuals with the knowledge, skills, and tools needed to address concerns about our health and environment while also enabling people to integrate this knowledge into sustainable social and economic planning. *"Environmental education is a learning process that increases people's knowledge and awareness about the environment and associated challenges, develops the necessary skills and expertise to address the challenges, and fosters attitudes, motivations, and commitments to make informed decisions and take responsible action" [4].*

As in every other program, environment education requires skilled human resources. The (National Environmental Education Advancement Project) has defined the term "Environmental Education Capacity Building" as "the development of effective leaders, organizations, networks, plans and evaluation in order to achieve comprehensive environmental education programs at the state and local levels [5].

Environment studies are marked by their interaction to the surroundings of every living organism; most important of all are the humans. *"Environmental issues affect all people and professions, including transportation, planning, health, labor, agriculture, business, and industry. To bolster the effectiveness of the field, collaboration and synergy among all of these groups are imperative. The audience and leadership of the environmental education profession must be broadened by more actively engaging all sectors of society" [6].*

Differentiating environment literacy from environment education is extremely important in planning for the environment education programs. Generally speaking, environment education's key characteristics are [7]:

- Relates to an environmental topic or issue.
- Makes use of the outdoors as a learning environment whenever possible and appropriate.
- Is a lifelong learning process.
- Is interdisciplinary and draws upon many fields of study and learning.
- Is relevant to the needs, interests, and motivations of the learner.
- Is based on accurate and factual information.
- Presents information in a balanced and unbiased manner.
- Inspires critical thinking and decision-making.
- Motivates people to take responsible action.
- Improves learner achievement and outcomes.

The challenges ahead, are to raise the level of environment education of the present Iraqi community as a whole, and of each successive generation by setting environment education programs. If the nation can meet this challenge, individuals will be more capable of analyzing environmental issues and making informed decisions as consumers, employees, parents, youth and students.

This research is an introductory procedure for merging the community in selecting their environmental priorities in the course of raising the community's environment education hoping for sustainable communities "*Sustainable communities are places where people want to live and work, now and in the future*" [Chapter 6, From Local to Global: Creating Sustainable Communities and a Fairer World]. Achieving a sustainable community needs full understanding for; the importance of interconnectedness between (socio-economic and environmental) measures. Those measures, depending on their relative relevance to environment perspective are referred to as (thematic and cross-cutting).

### THE NEED FOR CITIZEN INVOLVEMENT

Many of today's environmental challenges are complex and intractable, and they cannot be solved by the public authorities alone. Addressing these issues requires well informed citizens, environmentally literate and educated, and willing to translate their knowledge into action. That as a whole implies the need for the involvement of citizens in defining their environmental priorities.

Environment education has become an effective solution for achieving a sustainable environment worldwide, and so it should be for Iraq. Traditional environment literacy is no longer beneficial unless supported by educational programs and practical steps; enhanced by NGOs, private sector and the community "*We are moving beyond a time when we can rely on a cadre of environmental experts to fix our environmental problems.... A stronger public understanding of environmental science and related issues is a growing necessity, and comprehensive environmental education is the only answer that makes complete sense*" [8]. Apart from that, environment education plots partnerships amongst the different, social and economic, sectors & levels " *Bridge gaps between different groups, ministries, sectors (particularly public - private), student leadership and youth movements, as well as other stakeholders through new partnerships that develop understandings and actions to achieve sustainable practices*" [9].

Direct voting is a proficient and practical mechanism for assessing the existing environmental parameters and has proven to be one of the methods for circulating environment education "*Stated preference methods are direct valuation methods which ask people in a survey to place a value on the environmental asset in question either by rating, ranking, or choosing tradeoffs between various policy alternatives. These direct methods via questionnaires are the only approaches that can estimate Existence Value*" [10].

The selection of the issues embraced in the questionnaire, were based on the need for; intervening the ordinary (non-specialized) citizen in such practices and connecting purely environmental (thematic) with other socio-economic (cross-cutting) parameters. The scope of sustainable development shadows the selected issues, and thus more relevant to Sustainable Communities.

Women have had a fair participation in the research through their equal voting chances. The woman is subjected to the environmental degradation at levels, even higher than man, and should have a fair equivalent opportunity in environment management and decision

making. "Women have a vital role in environmental management and development. Their full participation is therefore essential to achieve sustainable development" [11].

## VOTING FOR THE ENVIRONMENTAL PRIORITIES

In June 2007, three hundred and twenty citizens (160 women & 160 men) were randomly chosen to participate in a questionnaire embracing (32), thematic and cross-cutting, environmental issues. Little personal information was also included (gender, age, literacy level and willingness to participate in further similar environmental activities). The citizens involved in the referendum were asked to list only ten environmental issues in descending preference order; from 1 (highest) to 10 (least).

Although the research was intended to focus on the methodology rather than the statistical approaches, surprisingly, the randomly chosen participants showed unanimous agreement (in-between the 320 voters) regarding the priority of the environment & socio-economic issues. (Fig.1) clearly demonstrates that (262) voters have voted for a single issue (Accumulated House Rubbish) as their first priority. Five environmental issues were selected by (201-262) voters namely (Accumulated House Rubbish, Deficiency in Power Supply, Sewage Flood, Polluted Drinking Water and Streets' Cleanness). Eight issues (priorities 6-13 in Fig.1) were voted for by (119-164) voters, (58-100) persons voted for ten environmental issues (Fig.1, priorities 23-14) and six issues were voted for by (18-42) voters (Fig.1).

The (320) voters' environmental priorities, are illustrated in (Table 1) in descending percentage order. The environmental issues were selected to cover (socio-economic) variables as well as thematic environmental issues "*Peace, development and environmental protection are interdependent and indivisible*" [12]. The environmental objectives are interlinked with development goals at, regional and national levels. "*In order to achieve sustainable development, environmental protection shall constitute an integral part of the development process and cannot be considered in isolation from it.*" [13].

Being more than half the Iraqi community, the women's environmental preferences have been elaborated in (Table 2). The special consideration for the women coincides with their effectiveness in prevailing healthy environment, decision making and environmental management.

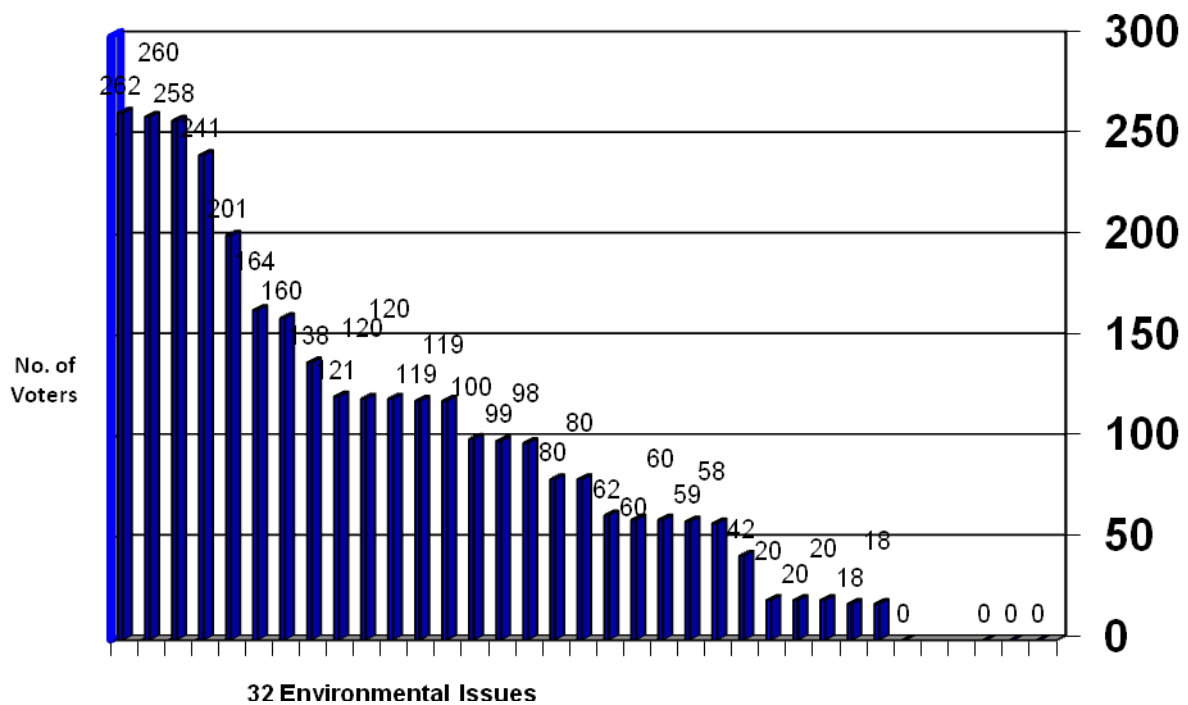


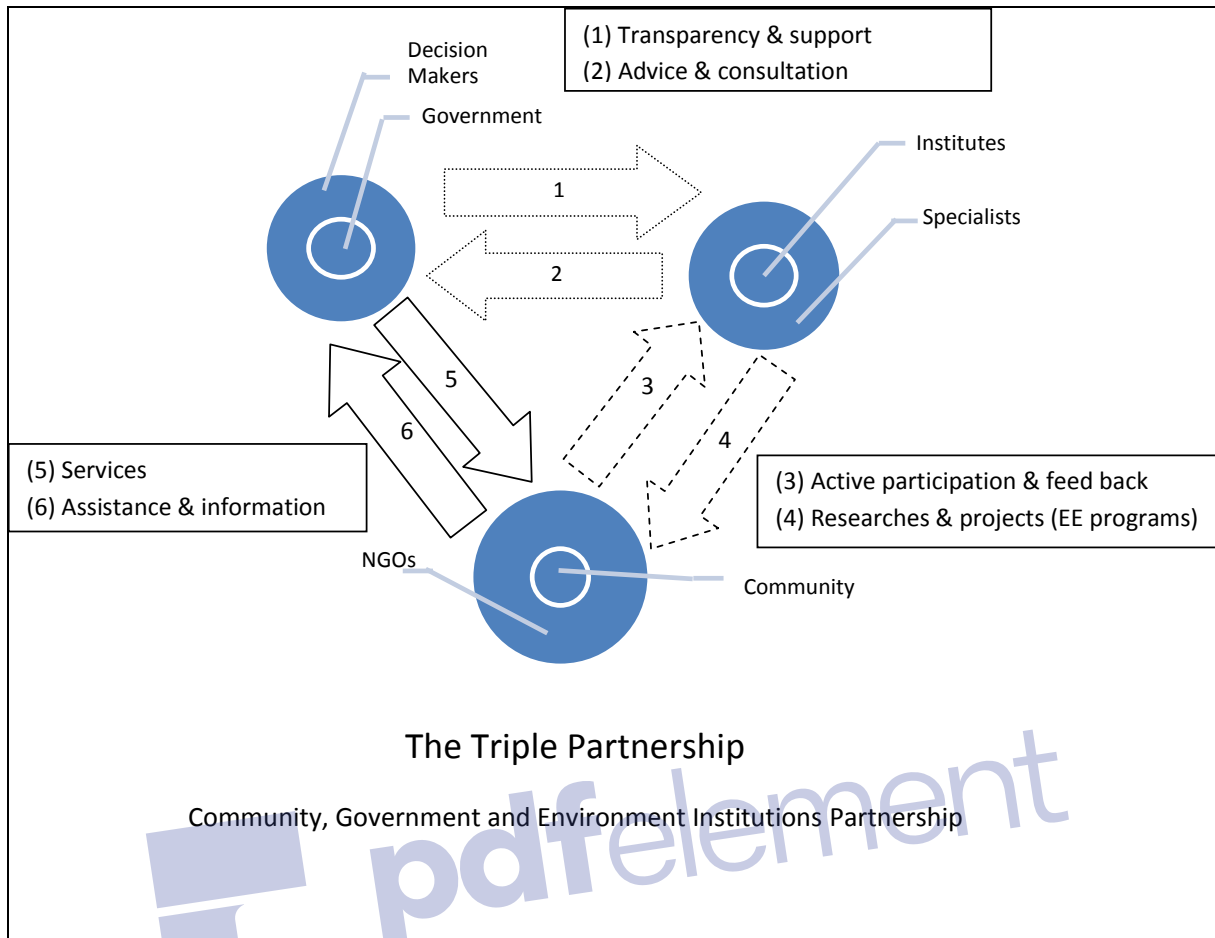
Figure 1 - VOTERS PER ENVIORNMENTAL ISSUE

## DISCUSSION

As for every other nation, environmental literacy by itself is insufficient to achieve the environmental goals and related objectives in Iraq. Internationally, this fact has been realized and dealt with through "EE" Environment Education programs. EE programs ensure the involvement of the community in; defining the surrounding environmental problems, arrange them in priority order, explore the treatments for the selected problems and finally participate in curing the resulted damage. This (chain of concern) has resulted to an environmentally aware community groups within the society and provided the required enhancement to preserve the environmental accomplishments achieved by the state services.

The factual relationship between the three associates; public authorities (government), environmentalists (researchers & specialist) and the community, demonstrates a reversible beneficial "Triple Partnership" illustrated in the following diagram;





Involving the Iraqi community in selecting their environmental preferences through a referendum, is one of the methods that could be very effective in; 1-raising the environmental awareness of the Iraqis, 2-provides the specialists and researchers with clear indications about the levels of the citizens' environmental, education & awareness, 3-eases understanding the community's needs and hence 4-ensures their participation in related plans and programs, and also 5- provide direct information for the decision makers about the needs of the citizens and therefore 6-assisting the government in providing the essential civil services to the community and 7- paving the interconnectedness between the community, decision makers and the Academic Institutions.

The selected environmental issues, presented in the referendum were either purely environmental (Thematic) or socio-economic (Cross cutting) issues. The (Energy and Environment Group, Bureau for Development Policy, United Nations Development Program) issued a study (Environmental Sustainability in 100 Millennium Development Goal Country Reports) in June 2005. It clearly illustrates that the (social and human pressures) have set several challenges that should be met and have pointed out that the priorities were related to socio-economic (cross-cutting) issues as much as were (thematic) [14].

The voters have proven their awareness of the environment degradation through their overwhelming agreement on certain issues as the (Voters Percentages) for each issue shows in (Table 1). Such agreement strongly suggests that the voters are fully aware of the environmental deterioration and keen to live in a healthier environment. On the other hand, the priorities could be categorized into (A, B, C and D) according to their preferences for the total voters, as distinguished in (fig. 1) and illustrated in (Table 1). The priorities (A) to (C), were suggested after the numerical gap represented by a descending/ascending jump in numbers of voters (although controversial in-between the priorities, A and B). As the voters were randomly chosen regardless of their residential areas, this categorization was only suggested to illustrate the interest of the participants, rather than to set statistics' based priorities (descriptive rather than statistical).

Gender's preferences fingerprinted the (men & women)'s attitudes and were reflections of their exposure (levels and locality) to the surrounding environment (natural and man-made). As (Table 2) shows, the non systematic transition from Category (A) to (D) reflects the issues that had different preference order as related to gender priorities. C-categorized issue (Deficiency of Irrigation Water) was the last preference for the men, while had the 10<sup>th</sup> for the women. Similarly the issue (Traffic Jams) categorized (B) was the women's last preference while was the 6<sup>th</sup> priority for the men. The Iraqi women's concern for the family was clearly demonstrated in many indicators reflected by the issues voted for, and their priority for the women. For example; women had greater concern about their families when voted for the issue (Drug Addiction) as 7<sup>th</sup> choice (15<sup>th</sup> for men). Exposing the different preferences as per gender (Table 3) could reflect the possible intra-variations as related to the whole community.

## CONCLUSION AND RECOMMENDATIONS

Direct voting is an approach for "Environment Education" that could verify the community's environmental needs and could be most effective to investigate the Iraqi community's priorities that reflect the needs of the citizens, whether being purely environmental or socio-economic. Gender's priorities were reflections of their sensitivity to the surrounding human environment. The total voters have proven to be aware of the environmental degradation and had an overwhelming agreement on particular issues that were presented in the questionnaire paving the way for a descriptive categorization for the voters' environmental preferences. The decision makers could invest such procedures for providing the urgent, yet required services for the community.

This research has emphasized that the Iraqis are eligible for listing their environmental preferences in priority order. The methodology of the research worth being imitated, although improved to be more specific, and oriented to be deeply involved in Environment Education Preparatory Programs. The surveys should be conducted on geographically circumscribed districts and directed toward defined educational and professional qualifications so that they could be useful in later EE programs. Such researches, apart from being useful for clarifying the interests of the participants, is a modernized

approach to let the community become involved in issues not only related to (Environment) but even beyond that; to (Sustainability) by merging socio-economic parameters with the environmental.

Environment Education Programs should be planned, by specialists, to comprehend all the Iraqi community at every level starting from primary schools' (education, curriculum and practices). University undergraduates as well, should be aware of the concept "Sustainable Development" and be prepared for their potential future leaderships. Also, government officials should be included, while the decision makers should play a significant role in approving the implementation of such programs. Generally speaking, every citizen should be aware of and well informed about how to participate in building up a sustainable (flourished; healthy and productive) community.

1	81.80 %	262	PRIORITY -A-	Accumulated House Rubbish	
2	81.20 %	260		Deficiency in Power Supply	
3	80.60 %	258		Sewage Flood	
4	75.30 %	241		Polluted Drinking Water	
5*	62.80 %	201		Streets' Cleanness	
6	51.20 %	164	PRIORITY -B-	Scarcity of Drinking Water	
7	50.00 %	160		Shortage of Fuel	
8	43.10 %	138		Smoke of Elec. Generators	
9	37.80 %	121		Streets' Pavement	
10	37.50 %	120		Environment Education	
11	37.50 %	120		Low Income Per Family	
12	37.20 %	119		Residence Crises	
13	37.20 %	119		Traffic Jams	
14	31.25 %	100		Drug Addiction	
15	30.90 %	99		Noise Pollution	
16	30.60 %	98		Air pollution	
17	25.00 %	80		PRIORITY -C-	Lighting Main Streets
18	25.00 %	80			Bribery
19	19.30 %	62	Streets' Forestation		
20	18.75 %	60	Soil Contamination		
21	18.75 %	60	Lighting Neighborhoods' streets		
22	18.40 %	59	Illiteracy		
23	18.10 %	58	Nepotism		
24	13.10 %	42	Deficiency of Irrigation Water		
25	06.25 %	20	PRIORITY -D-	Performance of Local TV Channels	
26	06.25 %	20		Scarcity of Public Toilets	
27	06.25 %	20		Unemployment	
28	05.60 %	18		Public Parks	

29	05.60 %	18		Hallucination Pills
30	00.00 %	----	Un-Voted For	Social Security
31	00.00 %	----		Cars' Noise pollution
32	00.00 %	----		Performance of Satellite TV Channels

- Table 1 -

**Environment & Socio-Economic Issues, Priority List, Voters (%)  
And Suggested Categorization**

\* Priority 5, Street Cleanness, could be categorized either (A) or (B).

Women's priorities	Category	Issue	Men's priorities	Category	Issue
1	A	Polluted Drinking Water	1	A	Deficiency in Power Supply
2	A	Accumulated House Rubbish	2	A	Sewage Flood
3	A B	Sewage Flood, Scarcity of Drinking Water	3	B	Shortage of Fuel
4	A	Deficiency in Power Supply	4	A	Accumulated House Rubbish
5	A	Streets' Cleanness	5	A	Streets' Cleanness
6	B	Smoke of Elec. Generators	6	C	Traffic Jams
7	B	Drug Addiction	7	A	Polluted Drinking Water
8	B B	Noise Pollution, Streets' Pavement	8	B B	Environment Education, Residence Crises
9	B B	Air pollution, Low Income Per Family	9	C C	Bribery, Streets' Forestation
10	C C	Lighting Main Streets, Deficiency of Irrigation Water	10	B B	Streets' Pavement, Low Income Per Family

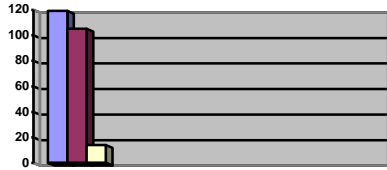

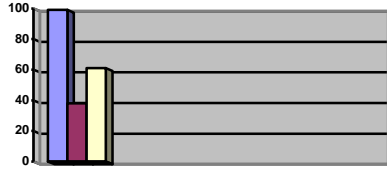
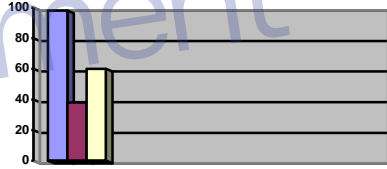
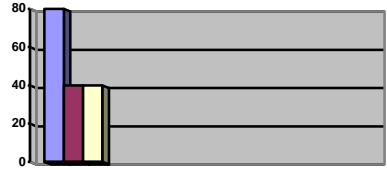
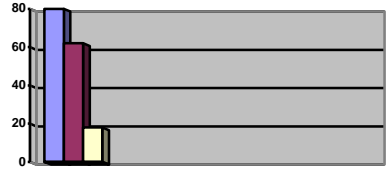

11	B	Shortage of Fuel	11	B	Smoke of Elec. Generators
12	C C C B	Lighting Neighborhoods' streets, Illiteracy, Soil Contamination, Environment Education	12	B	Scarcity of Drinking Water
13	B	Residence Crises	13	C C C C	Lighting Main Streets, Soil Contamination, Lighting Neighborhoods' streets, Nepotism
14	C C D	Bribery, Nepotism, Hallucination Pills	14	C	Illiteracy
15	B D	Traffic Jams, Performance of Local TV Channels	15	B B B	Drug Addiction, Air pollution, Noise Pollution
			16	D D	Scarcity of Public Toilets, Unemployment
			17	D D	Performance of Local TV Channels Public Parks
			18	C	Deficiency of Irrigation Water

- Table 2 -





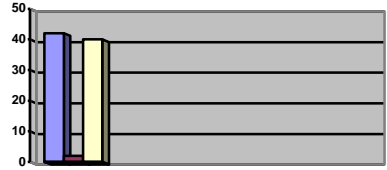
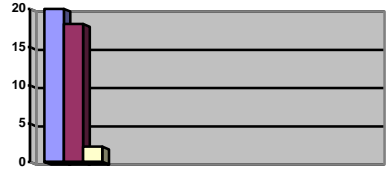

### Women & Men's Priorities

Priorit y	Issue	Tota l	Me n	Wome n	
1	Accumulated House Rubbish	262	123	139	
2	Deficiency in Power Supply	260	140	120	
3	Sewage Flood	258	136	122	
4	Polluted Drinking Water	241	101	140	
5	Streets' cleanness	201	117	84	

6	Scarcity of Drinking Water	164	42	122	
7	Shortage of Fuel	160	124	36	
8	Smoke of Elec. Generators	138	59	79	
9	Streets' Pavement	121	60	61	
10	Environment Education	120	100	20	
11	Low Income Per Family	120	60	60	
12	Residence Crises	119	100	19	

13	Traffic Jams	119	105	14	
14	Drug Addiction	100	38	62	
15	Noise Pollution	99	38	61	
16	Air pollution	98	38	60	
17	Lighting Main Streets	80	40	40	
18	Bribery	80	62	18	
19	Streets' Forestation	62	62	----	



20	Soil Contamination	60	40	20	
21	Lighting Neighborhoods ' streets	60	40	20	
22	Illiteracy	59	39	20	
23	Nepotism	58	40	18	
24	Deficiency of Irrigation Water	42	2	40	
25	Performance of Local TV Channels	20	18	2	
26	Scarcity of Public Toilets	20	20	---	

27	Unemployment	20	20	----	
28	Public Parks	18	18	----	
29	Hallucination Pills	18	----	18	

- Table 3 -

Men & Women's Preferences

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- [12] Principle 25, REPORT OF THE UNITED NATIONS CONFERENCE ON ENVIRONMENT AND DEVELOPMENT, Rio de Janeiro, 3-14 June 1992.
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