



## **PEP International**

An Empirical Study of the PERA Project and Environmental Awareness and Action

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# PEP International

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# Abstract

Enhancing environmental awareness and enabling environmental action are two vital components of the journey towards a sustainable future. Environmental awareness, to be aware of the pollution problems in our local environment is a prerequisite to action. Both environmental awareness and action are components needed for change to occur. However capacity to act is frequently missing.

PEP (Peoples' Empowerment Program) International focuses on capacity building in Bosnia and Herzegovina by strengthening local communities in the decision-making process in its Peoples Empowerment in Rural Areas (PERA) project. By strengthening their decision making process PEP encourages local communities to form a working group and identify and solve problems in their village together. The aim of this thesis is to learn if the PERA project has led to increased environmental awareness and pro-environmental action in the villages.

A baseline study was performed in the year 2009 by PEP before the project started as well as two follow-up studies the two following years of the PERA project. In this thesis both qualitative and quantitative methods are used as these studies are analyzed as well as semi-structured interviews performed by the author with working groups in the project.

The main findings based on the semi-structured interviews are that with the passage of time, more meetings are held and more people attend, bringing their opinions to the table, environmental awareness seems to be increasing. The questionnaires also show that pro-environmental actions are increasing. People claim that with open village meetings, as PEP encourages, new light is brought to the discussions about village problems. According to the interviews people claim that women and young people that have never before attended meetings appear to have triggered discussions about environmental problems, and as a result working groups claim their next priority projects are environmental projects.

# Útdráttur

Aukning umhverfisvitundar og aðgerðir í umhverfismálum eru tveir ómissandi þættir sjálfbærrar framtíðar. Umhverfisvitund, þ.e. að vera meðvitaður um umhverfisvandamál tengd mengun, er forsenda framkvæmda. Bæði umhverfisvitund og aðgerðir eru nauðsynlegir þættir ef breytingar eiga að verða. Vandamálið er að athafnagetu skortir oft.

Stofnunin PEP (Peoples' Empowerment Program) International sérhæfir sig í að byggja upp athafnagetu í gegnum þáttökulýðræði hjá samfélögum í Bosnía og Hersegóvínu og rekur til þess PERA-verkefnið (Peoples Empowerment in Rural Areas). Með styrkingu þáttökulýðræðis hvetur PEP International samfélögin til að mynda vinnuhópa til að skilgreina og leysa vandamál samfélagsins í sameiningu. Markmið þessarar ritgerðar er að komast að því hvort PERA-verkefnið hafi í raun og veru náð að auka umhverfisvitund og hvetja til jákvæðra umhverfisaðgerða á umræddu svæði.

PEP vann grunnrannsókn árið 2009 áður en hafist var handa við PERA-verkefnið. Þá voru tvær tveggja ára framhaldsrannsóknir unnar í tengslum við PERA-verkefnið. Niðurstöður þessara rannsókna eru notaðar í þessari ritgerð auk viðtala sem höfundur tók við þátttakendum í verkefninu.

Meginniðurstöður ritgerðarinnar sem byggjast á viðtölunum eru þær að þegar fundarferlið er komið í gagn, með auknum fjölda þátttakenda og tilheyrandi skoðanaskiptum, virðist umhverfisvitund aukast meðal þátttakenda. Spurningalistar grunnrannsóknarinnar gefa einnig til kynna að umhverfisaðgerðir hafi aukist. Þátttakendur halda því fram að þeir opnu íbúafundir eins og þeir sem PEP hvetur til, varpi nýju ljósi á þau vandamál sem steðja að samfélaginu. Samkvæmt viðtölunum hefur það komið í ljós að konur og yngri kynslóðir sem hafa ekki tekið þátt í slíku ferli áður virðast hvetja til umræðna um umhverfisvandamál og er afleiðing þess sú að umhverfismál eru sett í forgang.

# Preface

When I was a teenager I moved to Croatia with my family. It was during the Bosnian war and things were not exactly as I was use to in Iceland, but as time went by I got used to the surroundings. Although I moved back to Iceland in 1995 the Balkan was my second home, travelling there almost every year since then as my parents kept on working all over former Yugoslavia. At first I always thought the situation in former Yugoslavia was caused by the war. Everything was somehow dirty, smoke from oil or coal heating, trash burning in every yard and all over were garbage piles. I found it strange that with extraordinary landscape like the one found on the whole Balkan, people don't take care of it and throw trash wherever convenient. No matter where I travelled, all over the Balkan, trash was by the road or sidewalk, in the river or even at the playground for kids. On a cold winter day you could hardly see the house across the street because of smog. I used to think that because of the war all garbage pickup had been canceled and people had to use coal stoves to heat up their houses. As time went by nothing really changed, the garbage was still all over the country, the pollution was immense.

I started to think why? Why don't people take better care of their near environment? What causes people to throw trash wherever they choose to? And what's more important: does no one want to change this? Are people just used to having things like this? Or do they just not care? I wanted to find out if there was any agency working on this issue, trying to bring back or establish garbage pickups or even just working on teaching people about environmental issues.

In 2003 my father became the Director of PEP (Peoples' Empowerment Program) International at first stationed in Macedonia from 2003 until 2007 and now in Bosnia and Herzegovina. Using those connections I discussed my concerns with friends and staff at PEP International. They started explaining the important issue and the necessity of people realizing for themselves the problem at hand and work together in finding solutions. They had realized through their work for PEP International that trying to take the short cut, telling people what to do or by asking them to change their ways was useless, there are no short cuts when trying to change people's behavior. Every work would have to start at the ground level and as for PEP they would present to people few simple tools on how to identify a problem and find solutions for themselves, not telling them what the problem is and asking them then to solve it.

At this point I realized what I wanted to research in my thesis. If PEP International was working on strengthening the local communities in the decision-making process, to identify problems and solve them for themselves, what would the local communities identify? Would they start thinking of their near surroundings? Would they want to take care of environmental problems in their communities? Or as I ask in my research question;

Does the PERA project, applied by PEP International in strengthening the local decision making process, enhance environmental awareness and action?



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# Abbreviations

BiH	Bosnia and Herzegovina
CSO	Civil Society Organization
KM	Konvertibilna Marka
LC	Local Community
LG	Local Government
LOD	Local Democracy
MZ	Mjesna Zajednica (Neighborhood Community)
NGO	Non-Governmental Organization
OSCE	Organization for Security and Co-operation in Europe
PCM	Project Cycle Management
PEP	People Empowerment Program
PERA	People Empowerment in Rural Areas
SIDA	Swedish International Development Cooperation Agency
SPSS	Statistical Package for the Social Sciences
SWOT	Strengths, Weaknesses, Opportunities and Threats
UN	United Nations
UNDP	United Nations Development Program
VAT	Value Added Tax
WHO	World Health Organization





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# 1 Introduction

People's awareness of environmental problems has been a changeable attribute of human existence and has to be studied for each setting and point of time. Public awareness of environmental problems peaked in 1970 when the first Earth Day was held but slowly declined in the following decades (Dunlap & Scarce, 1991). Environmental awareness or a concern for our near environment and actions towards those problems can make a difference for the health and well being of the whole community. In developed countries, many citizens have started recycling and choosing products that are better for the environment, companies have started the process of reducing emissions and so on. There can be a difference in environmental problems between developed and developing countries (Simioni, 2004). As an example in many developing countries there is a lack of adequate infrastructure to manage municipal waste safely so instead waste is buried, burnt in the open air or dumped into surface water bodies (Nnorom & Osibanjo, 2008).

Environmental problems can cause many health problems if they are not taken care of. Open sewage systems can cause various diseases and pollute drinking water. With polluted drinking water the health of nearby citizens is greatly threatened. Hazardous waste can come from all households, so if garbage disposal or garbage pick-up are not properly organized it can contaminate the soil and along with the open sewage system, pollute the drinking water and attract pests (Ayomoh, Oke, Adediji, & Charles-Owaba, 2008; Schwarzenbach, Egli, Hofstetter, von Gunten, & Wehrli, 2010). As often where there is no garbage pick up the waste is burned close to the neighborhood or village which can send seriously harmful substances into the air, causing even more serious health problems (ATSDR, 2011) such as heart disease, lung cancer, acute respiratory infections (Kampa & Castanas, 2008).

Lack of knowledge and education about environmental problems and lack of capacity to tackle them can all be factors which explain the lack of actions preventing environmental problems (Spence & Pidgeon, 2009). Years of habits can also be a factor (Lorenzoni, Nicholson-Cole, & Whitmarsh, 2007; Steg & Vlek, 2009) and the fact that in many countries citizens have little or no say in project decisions for their villages. Hence, lack of public involvement could also explain the lack of action against environmental problems (Pidgeon, 2010).

PEP (Peoples' Empowerment Program) International is a small research oriented non-Profit member organization, working towards sustainable development. It was established in Iceland in December 2002 and fully registered in January 2003. The objective of PEPs project, Peoples Empowerment in Rural Areas project, hereafter referred to as the PERA project, is to strengthen the public involvement in the decision making process and the main focus is on the communication between Local Government and the citizens in rural areas and urban developing areas in Bosnia and Herzegovina. Before PEP started its PERA project in Bosnia and Herzegovina it had also been working in Macedonia and Albania with a project called AMPEP which was a community based project until 2007 and was developed into the PERA project established in Bosnia & Herzegovina 2008-2011. PEP International is working with the citizens in these areas,

helping them to understand and exercise their rights, identify and prioritize their problems, file claims to their local authorities, and solve the problem identified.

Public participation in the decision making process has been very little if any in Bosnia and Herzegovina, the citizens have not demanded that the local government implement changes or assist them in any way. According to interviews, citizens claim they were not even aware that they actually have the option to seek their rights. In many cases the local government does not give the citizens the opportunity to speak out regarding their needs but rather chooses itself the projects for the villages. Asphalt is a popular material in the projects that the Local Government chooses, such as, wider roads, paved sports fields or a paved square in the middle of the village. All the projects seem to be visible and costly for the citizens, while at the same time infrastructure is not properly maintained or built. Many villages don't have proper sewage systems or garbage disposal, so garbage is thrown into the next creek or at the side of the road and the sewage flows down the hill and out of sight. Schools often do not have central heating and no running water so it is not unusual that the toilet facility for the school is outdoors.

Strengthening public participation in the decision making process with emphasis on increased environmental awareness as well as the capacity for action could have enormous effects on people's health and livelihood. Is it possible that PEPs work in strengthening the public's involvement in the decision making process enhances environmental awareness, encouraging people to make more claims on Local Government to tackle environmental problems?

Therefore the research question is as follows:

Does the PERA project, applied by PEP International in strengthening the local decision making process, enhance environmental awareness and action?

To answer this question qualitative and quantitative research methods were used, semi-structured interviews with focus groups were performed, and a baseline study performed in the year 2009 and two year follow up studies performed in 2010 and 2011 by PEP International as well as other material collected by PEP through the PERA project were analyzed.

PEP performed the baseline study, and the same questionnaire was applied every year for three years or since the project started in 2009 until 2011 and the answers from those questionnaires were used and analyzed in this thesis.

The questionnaire (Appendix A) was designed by staff members of PEP International at the beginning of the PERA project. The survey reaches all the villages PEP is working with as well as neighboring villages to see if the project has affected them in any way. For comparison villages in municipalities external to the active villages, which were probably not affected by the PERA project, have been chosen for the survey. This questionnaire should shed a light on the impact the PERA project has on villages active in the project, and if there is a spill-over affect in the neighboring villages as well as to the external villages.

The analysis performed should give an idea if any change has been in environmental awareness and action. Secondary data such as files and reports connected to the project at PEP were open for access to the researcher through this research, as well as all meeting

minutes, notes from staff, project analyzes for each and every village, and all other material from PEP needed for this research.

## **1.1 Structure of the thesis**

The thesis is divided into seven main sections. As the first section was the introduction of the thesis, the second section is a literature review where various studies on the matter of environmental awareness and action are discussed or reviewed. The third section of the thesis is an overview of the case, PEP International is introduced, its main focus, geographical coverage and approach the organization uses laid out in detail. The fourth section of the thesis is an overview of the research methods. The fifth section contains the study where the chosen questions from the questionnaire are analyzed in detail as well as the interviews and draws together the results analysis from both questionnaire and interviews. The sixth section presents the discussions, summarizes the main results, weaknesses of the research and future research. In the seventh and final section main conclusions of the study are presented.



## **2 Literature review**

For decades now environmental concern, awareness and behavior has been studied. Numerous studies have been performed that link together various factors such as environmental awareness and age or gender. Linkage between environmental concern and behavior and what the barriers are for pro-environmental behavior have been closely examined. This chapter is a short review of some of the studies performed on this matter. The purpose of this literature review is to gain a better understanding as to where this study lies, how it correlates with other studies performed on environmental awareness and action and what possible gap in the literature it could fill.

### **2.1 Environmental problems**

Environmental concern is not only necessary for the environment's sake but also for the sake of people's health and well-being. Environmental awareness is a crucial prerequisite for people to realize the necessity to deal with environmental problems, to be conscious of the threat of environmental problems, what issues can arise from environmental problems and what impact environmental problems can have on people's life.

There are many things that can cause serious environmental problems and household waste is one of them. Number of issues can arise from garbage, whether it is burnt, thrown out in the open or buried.

Individuals must be aware of the fact that by throwing trash, which can contain flammable material, on the side of the road is wasteful, and can be much more costly than garbage collection every month. Trash thrown at the side of the road or flowing down a hill and into the forest can easily cause forest fires, and with the health threat of the smoke coming from such fires there is also the threat of fire spreading near the village putting everyone's homes in danger. An increasing cause of wildfire is the burning of large quantities of solid waste (Food & Agriculture Organization, 2007). More than 90% of forest fires in Spain and in other European Mediterranean countries are caused by people (Martínez, Vega-Garcia, & Chuvieco, 2009) when burning trash or by throwing household waste out in the open.

By burning trash, series of hazardous chemicals are released into the air. Some might think that burning only paper is not a problem but by burning a magazine or a cardboard box releases acrylamide which targets the nervous system and reproductive system, as well as cadmium which can damage the kidneys, lungs, and bones, it also releases release chlorophenol and formaldehyde. Formaldehyde can cause irritation of the eyes, nose, and throat as well as neurological effects. Exposure to high levels of chlorophenol can cause damage to the liver and immune system and, many more (ATSDR, 2011).

From burning household garbage chemicals enter the air, soil and water and particulate matter can be inhaled into lungs and cause respiratory disease, including asthma, bronchitis and emphysema, as well as heart problems and cancer. According to the WHO

statistics on death related diseases in Bosnia and Herzegovina the most common cancer in the age groups from 15 to 65+ is lung cancer which can be caused by air pollution as well as stomach cancer which can be caused by drinking polluted water (WHO, 2011).

Polluted drinking water is a serious problem and can cause several health issues. Low quality of drinking water can cause both diarrheal and a non-diarrheal disease, but diarrheal diseases are the second most common contributor to the disease burden in developing countries (Hunter, MacDonald, & Carter, 2010). Contamination of groundwater from municipal solid waste landfill is a prominent cause of water pollution (Schwarzenbach, et al., 2010). Several hundred thousands of sites can be found throughout the world, where 100 million tons of waste have been and still are discarded. Many of them contain organic or inorganic chemicals that have been implicated in difficult health effects that range from acute nausea and vomiting, skin rashes, cancer and fetal abnormalities (Hunter, et al., 2010). Even occasional consumption of unsafe water results in increased health risk, particularly for children.

Article 25 of The Declaration of Human Rights states that everyone has the right to a standard of living adequate for the health and well-being of himself (United Nations General Assembly, 1948). A proper garbage collection and disposal as well as satisfactory drinking water are therefore a basic need for adequate living conditions.

## **2.2 Sustainable development**

Sustainability has three dimensions: environmental, economic and social. The goal of sustainable development is to improve the living standards and the quality of people's lives for now and future generation and therefore environmental issues are important piece in development (The World Bank Group, 2001). Both developed and developing countries share environmental concerns. Both must guarantee that citizens in cities and rural areas have clean air to breathe, safe drinking water, and adequate supplies of clean renewable energy.

Development is a qualitative concept which incorporates ideas of improvement and progress and includes cultural and social as well as economical dimensions, but focuses mainly on relative distribution of scarce resources (Blowers & Glasbergen, 1995).

According to Fraser et al. (2006) top-down approaches to sustainable development have come under an attack in recent years. They concluded in their research that a bottom-up approach is more likely to lead to sustainability. Strengthening the local communities in decision-making helps address what is most important locally and it helps build up community capacity to address future projects and therefore becomes more sustainable (Fraser, Dougill, Mabee, Reed, & McAlpine, 2006).

Democracy is an inherent part of the process. If we can end monopoly of economic, political or cultural resources, then equity, sustainability, efficiency and the environment all gain. Development so defined is participatory development; for people to prosper anywhere they must participate as competent citizens in the decisions and processes that affect their lives. Development is thus about the quantity and quality of empowerment and participation of people... Development so defined is not

the purview of neoclassical economists. Indeed they are a large part of the problem (Gran, 1987).

Community development, public participation or capacity building are now phrases which many development agencies have implemented to their agenda or goals. With sustainable development, the development can be explained as a social change process for fulfilling human needs that refers both to material and non-material needs. Material needs or rather the basic needs include the necessities of life such as sufficient food, water, and shelter. Non-material needs relate more to quality of life such as health, political freedom, human rights, and clean, healthy and accessible natural environment (Roseland, 2000). Sustainability requires maintaining an adequate per capita stock of environmental assets for us and future generations and avoiding irreversible damage to any significant asset.

In an article written by Mark Roseland (2000), in which the purpose was to stimulate discussions about the community role in sustainable development, he added a few comments describing sustainable communities. Here is how some Minnesota citizens defined sustainable community (Roseland, 2000);

“A sustainable community is “a community that uses its resources to meet current needs while ensuring that adequate resources are available for future generations. A sustainable community seeks a better quality of life for all its residents while maintaining nature’s ability to function over time by minimizing waste, preventing pollution, promoting efficiency and developing local resources to revitalize the local economy. Decision-making in a sustainable community stems from a rich civic life and shared information among community members. A sustainable community resembles a living system in which human, natural and economic elements are interdependent and draw strength from each other.”

It has been argued that sustainable development strategies should favor bottom-up approach rather than top-down approach (Brohman, 1996). Strengthening the local community in the decision making process it gives a more solid ground for building up a sustainable community (Fraser, et al., 2006). Sustainable development strategies should be designed with extensive public participation, seek to improve society and the environment as well as the economy and by that increase equity, equality and empowerment (Brohman, 1996). Sustainable development thus depends on the quantity and quality of empowerment and participation of people, and requires activation of citizens and their governments toward sustainable communities (Roseland, 2000).

Effective public participation or community engagement is particularly important when addressing challenges of environmental problems. To effectively engage citizens and communities in action, an informed understanding of the urgency is required as well as the strengthened understanding of the potential and capacity for collective action (Wiseman, Williamson, & Fritze, 2010). It is not enough for people to know about climate change or other environmental problems; they also need to care about it as well as to be motivated and able to take action (Lorenzoni, et al., 2007). Developing sustainable solutions to environmental issues involves all societal stakeholders (Lorenzoni, et al., 2007).

It is necessary to create awareness about those environmental issues but what is most important is build on that and strengthen the capacity for environmental action.

Environmental action is the only way to ensure environmental sustainability; it is not enough to be aware of the environmental issues, as on its own it does not ensure actions (Lorenzoni, et al., 2007).

## **2.3 Environmental Awareness**

Opinion surveys have been performed ever since the 60s on people's perspective towards pollution problems. Erskine performed one of the first studies on the public's environmental concern. In that study he illustrated the increased environmental concern among the American public between the years of 1965 to 1970. His analysis of the survey showed that from the year 1965 to 1970 people's concern had increased from one out of five to four out of five persons considered the pollution problem serious (Erskine 1972 quoted in Iizuka 2000). A survey conducted by Dunlap and Scarce on people's opinion in the United States show that environmental concern reached a peak in the 70s following the Earth Day<sup>1</sup> and then steadily decreased throughout the decade (Dunlap & Scarce, 1991). Although the concern steadily decreased it did not drop down as was expected by many scholars (Dunlap & Scarce, 1991). The environmental concern lingered instead through the decades yet changed considerably in the eighties with the Reagan administration and the backlash against the administration's environmental policies led to an increase in public support for environmental protection. The trend continued after the discoveries of global warming and ozone depletion with a further increase after environmental disasters like the Exxon Valdez disaster which led to a substantial increase in people's concern for the environment. Dunlap and Scarce state that environmental awareness was then probably given a "boost" by the twentieth anniversary of the Earth Day and that in the spring of 1990 the environmental concern had reached unprecedented proportions (Dunlap & Scarce, 1991). In 2001 yet another survey was performed by Gallup in celebration of the 31<sup>st</sup> Earth Day. The survey suggests that only a quarter or so of Americans are highly troubled about environmental conditions, about half that number could be described as satisfied, while the remaining majority is only moderately concerned about the environment (Dunlap & Saad, 2001)

Surveys performed as far back as twenty years ago in the European Union show that levels of environmental concern in western European countries have been rising significantly since the 60s and show a relatively high level of environmental concern today (Lorenzoni & Pidgeon, 2006).

Dunlap, et.al, (1993) performed an extensive survey based on face-to-face interviews that included twenty-four nations covering a wide range of economic levels and geographic regions. Their goal was to survey citizens in a wide range of nations both geographically and economically and thereby to go beyond the existing cross national environmental surveys that had been limited to Europe and North America. Their focus was first on the seriousness of environmental problems and then to rate the quality of the environment in their local community, nation, and the world as a whole (Dunlap, Gallup, & Gallup, 1993). Their main conclusions were that people in less developed nations tend to rate their local

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<sup>1</sup> Earth Day is an annual day on which events are held worldwide to increase awareness and appreciation of the Earth's natural environment.

environment much more worse than their counterparts in the highly developed nations, residents of the richer nations tend to see the world environment as far worse than either their local or national environment. The survey concluded that public's concern for the state of the environment seemed to have become a world-wide phenomenon and people in poorer nations tend to be especially concerned for their local environment (Dunlap, 1994; Dunlap, et al., 1993).

In general the most common methods used to measure environmental awareness are surveys in the form of questionnaires or in-depth interviews. Whether used together or only one or the other, these are the most common method when measuring environmental awareness or concern. A careful research did not reveal any studies on environmental awareness from Bosnia and Herzegovina were found.

## **2.4 Environmental awareness and age**

Many surveys show a connection between environmental concern and certain age groups. Some studies suggest that the younger generation shows more concern for the environment because of environmental education due e.g. to the influence of the news or media (Dunlap, 1980 quoted in Iizuka 2000).

The earliest study of this concern was performed by Malkis and Grasmick (Iizuka, 2000) and concluded that a dominant relationship existed between age and environmental concern. Furthermore, another extensive literature survey was performed by Dunlap and Van Liere in the year 1980 (Iizuka 2000) which also suggested a clear relationship between age and environmental concern.

In these studies an attitudinal change due to ageing is said to be the basis of changing views, suggesting that the individuals' role in society that changes with age. With age, individuals tend to become more involved in religious, political and economical systems and by that are pressured to take conservative actions to preserve the status quo (Hornback, 1974 quoted in Iizuka 2000) until recently, nowadays environmental issues are considered a threat to existing social order and the younger generations have become more interested in environmental conservation.

Glenn (1980) stated a preference to the cohort effect since his studies showed that cohort data failed to support the ageing-conservatism but in fact showed that individuals and cohorts have generally become more liberal rather than conservative over the years (Glenn, 1980). Inglehart (1990) supported this theory and said that the massive data he utilized in his analyzes of cultural change from multiple perspectives showed a virtually perfect fit with theoretical expectations; the younger cohorts are consistently less materialist than the older ones (Inglehart, 1990) and said that historical and social condition of individuals in their formative years are an important factor to determine their pro-environmental preferences (Inglehart, 1990)

Although many have found that environmental concern or awareness is greater with younger generations not all studies have come to that conclusion. In a survey performed by Bodur and Sarigöllu, with a sample of 1000 residents in Istanbul, they study Turkish consumers' attitudes and their behavior towards the environment. They concluded that environmentally concerned costumers were not younger , but they were better educated (Bodur & Sarigöllu, 2005).

## **2.5 Environmental awareness and gender**

Like the relationship between environmental concern and age the relationship between environmental concern and gender has also been theorized. Hamilton (1985) explored the relationship between parenthood and environmental concern and concluded that for men, parenthood reduces concern but for the mothers increases (Hamilton, 1985). Further research done by Blocker and Eckberg analyzed the gender differences with respect to general and local environmental issues. Their findings from a local survey indicate that whereas women are no more concerned than men about general environmental issues, they are significantly more concerned about local environmental issues (Blocker & Eckberg, 1989). It is proposed that such differences are based on the role mothers have in society, prioritizing welfare and health of the family associating it with the local environmental quality such as water, air and solid waste (Iizuka, 2000).

Earlier studies indicate that women have more environmental concerns because men are more occupied with economic growth and stability (Van Liere & Dunlap, 1980). But some earlier studies by McEvoy in 1972 indicate that men are more environmentally concerned due to their higher level of education (Van Liere & Dunlap, 1980).

Times have changed since the seventies; women enjoy equal rights to a greater extent in particular regarding education and the opportunity to pursue a career. Therefore it is no longer only the women's obligation to take care of the home and children. However in many developing countries and some cultures women are still supposed to be at home while the men are out working.

New studies regarding climate change have in fact shown that women are either more concerned or more aware of climate change than men. In a survey performed in 2007, 1202 people in the USA were interviewed regarding awareness, concern, and behavior change related to climate change. It showed that women were significantly more concerned about climate change than men (Semenza et al., 2008).

## **2.6 Environmental awareness and action**

The relationship between environmental awareness and factors like age, gender, social status and other factors has been extensively studied. However studies are lacking on the relationship between environmental awareness and actions related to that. That relationship might be one of the most important of all.

Studies on environmental values, beliefs and action among rural and urban dwellers indicated that people living in urban areas were more environmentally concerned than those living in rural areas; however the study suggested that the latter have a stronger sense of moral obligation to care for the environment, and show more attitudes of environmental responsibility and greater consistency on expressing behavioral intentions compatible with the protection of the environment (Berenguer, Corraliza, & Martin, 2005).

However, these studies do not address the question what factors might influence this social structure, or the reason why people in rural areas have a more developed moral sense.

Interviews with focus groups conducted across England showed that people view the responsibility of tackling climate change residing primarily at the state actor level. When people were asked if they were personally prepared to do something themselves about climate change, the majority said that it is difficult to take appropriate action but they would, with the right guidance, help or incentives from the government (Bickerstaff, Simmons, & Pidgeon, 2007).

Spence and Pidgeon (2009) concluded in an extensive review of previous studies that merely making people more concerned about climate change impacts, or more knowledgeable about the science, is unlikely to lead to a change in behavior or different attitudes (Spence & Pidgeon, 2009). Long-term effort to change people's lifestyles, values and habits is more likely to lead to behavioral change (Spence & Pidgeon, 2009).

Well targeted communications are an important method to encouraging sustainable behavior, although Spence and Pidgeon (2009) concluded that they are often not enough. Public communication interventions are often criticized for being inadequate in terms of bringing out and sustaining full behavioral changes (Spence & Pidgeon, 2009; Steg & Vlek, 2009). Many things may prevent people from acting sustainably. People may lack the funds to buy a more energy-efficient products, they may have more immediate priorities, or be hesitant to change their current lifestyle (Spence & Pidgeon, 2009). Sometimes people may simply not have the physical means to change their behavior or the existing infrastructure may not facilitate desired behavioral changes. In fact, Spence and Pidgeon (2009) agreed that behavioral change is best achieved through a combination of downstream and upstream approaches. The downstream approach refers to communications designed to change existing values and beliefs, and more external structural-situational measures (Van Der Linden, 2011). Upstream approach refers to external structural changes, including legal constraints and physical changes to the environment, that encourage people toward different practices and lifestyles (Spence & Pidgeon, 2009; Van Der Linden, 2011). Such measures could help provide the capacity and opportunity for people to change their behavior (Spence & Pidgeon, 2009; Steg & Vlek, 2009; Van Der Linden, 2011).

Pidgeon (2010) noted that one way to change behavior is to foster grass-root demands and direct public support. It is essential to listen to the public when designing and implementing environmental policies, and therefore organize public participation. Participatory approaches are useful to understand people's perspective, to attract people's attention and gain their commitment, to design interventions that are within people's limits of tolerance, to build support for such interventions, and to increase public involvement in environmental policy making (Pidgeon, 2010; Van Der Linden, 2011). Participatory approaches are for example used in the UN Agenda 21 program.

### **2.6.1 Behavioral change**

Environmental problems pose a threat to sustainability and many of these problems are caused by human behavior. Thus the relevant behavior has to be changed in order to reduce environmental impact (Steg & Vlek, 2009).

To encourage pro-environmental behavior it's not only necessary to inform people better about the threats of environmental problems, a stepwise process in structural and institutional change is needed in order to change human behavior (Lorenzoni, et al., 2007). In many cases behavior is controlled by habits that are guided and automated

cognitive processes (Lorenzoni, et al., 2007; Steg & Vlek, 2009). Habitual behavior is when people frequently act in the same way in a particular situation. The more frequently this situation arises the stronger the habits become (Steg & Vlek, 2009). To change a habit can prove to be very difficult even if the new behavior has a distinct advantage over the old habit (Kollmuss & Agyeman, 2002).

Another barrier to behavioral change is that people distrust those who provide information about climate change or environmental problems (Lorenzoni, et al., 2007). Therefore information and communication about environmental issues need to be sustained on a regular basis by creating awareness, acceptance and norms in respect to climate change actions (Lorenzoni, et al., 2007). With a long-term framework of incentives and involvement of the public in decision making processes, people can overcome this distrust and become more open in addressing climate change issues (Lorenzoni, et al., 2007).

Interventions and government programs concerning environmental issues by involving the public tend to be constrained by a short-term and disjointed nature and therefore might only have short-lived effects (Lorenzoni, et al., 2007; Steg & Vlek, 2009). Effective environmental management requires a long-term perspective and a systematic change and it is very important to evaluate the long-term effects as well (Lorenzoni, et al., 2007). Regular systematic evaluations can reveal how successful the interventions have been in changing behavior. Ongoing regular evaluations and measurements can strengthen the commitments of the public to change their behavior (Steg & Vlek, 2009).

## **2.7 The gap in the literature**

Through the years many studies have been performed on the subject of environmental awareness and action. Questionnaires are frequently used as well as interviews of some sort to this end. Short review of the literature at hand, discussed studies on environmental awareness linked with gender and age, studies on awareness and action and behavioral change concerning environmental awareness and action. The studies have shown that women and young people are in many cases more aware of environmental issues. They have given a theoretical paradigm about what could possibly enhance environmental action or what could change ones behavior and illustrated what needs to be done to enable the capacity for pro-environmental action.

What seems to be missing from the studies is what might be the trigger for environmental actions and whether that particular trigger truly increases environmental awareness and promotes environmental action. When studying sustainable development and what might lead to long-term sustainability, a missing angle is a thorough study of an organization and its practical project where those theoretical paradigms have been implemented.

Therefore there seems to be a gap in the literature about what might in fact cause environmental action, what approach actually enhances environmental awareness and might strengthened peoples capacity to engage in pro-environmental action.

The significance of this study is that it concerns a development project, which in fact has incorporated some of the theoretical paradigms into its agenda to strengthen public participation, and the effects it has on environmental awareness and action. Thus it

measures the cause and effect relationship of a realistic development project and the effects it has on environmental awareness and action.

This study on PEP International and the PERA project is as far as known the first study on this subject performed in Bosnia and Herzegovina. Thus another gap in the literature is filled with this research.



### **3 The PERA project**

In the year 2008 PEP International in cooperation with SIDA (Swedish International development cooperation agency) introduced its PERA (Peoples' Empowerment in Rural Areas) project in Bosnia and Herzegovina. It was thirteen years after the Dayton agreement was signed which ended a barbaric warfare in Bosnia and Herzegovina where almost 105,000 (Zwierzchowski & Tabeau, 2010) Bosnians were killed, bonds of family and community were strategically destroyed and millions of people deported or forced to flee their home. During these atrocities, houses, schools, and hospitals were damaged or completely destroyed with roads, water systems and power plants ruined as well (Center for Balkan Development, 1996). The need for community restoration was vital.

The main goals of PEP were to establish procedures and practices to strengthen the communication in and between villages and their local governments as well as facilitate sustainable development of rural villages in BiH, which ultimately would lead to improved quality of life in a number of rural villages. The main operational objectives of the PERA project were:

- Structured communication is established and sustained between village councils and local governments.
- Measurable positive changes on issues of local governing are verified and documented in the villages.
- Projects of public service nature are completed through the cooperation of villages and local governments within the targeted areas.
- The targeted local governments are actively disseminating the practices established by the project through their municipal association (PEP International, 2012).

The project was based on a set of democratic principles in line with the BiH governmental strategy on local governing to increase the involvement of citizens in decision-making processes. The timeframe for the direct implementation of the project was three years in addition to the preparation, evaluation and reporting period; hence it covered the period from September 2008 until April 2012.

## 3.1 Approach

The basic philosophy behind the PERA project was to focus on the capacity building for everyone directly engaged in the project. Staff training and preparation was at the core of the implementation and every step had at least one or two training sessions before being applied on the field.

### 3.1.1 Geographical coverage

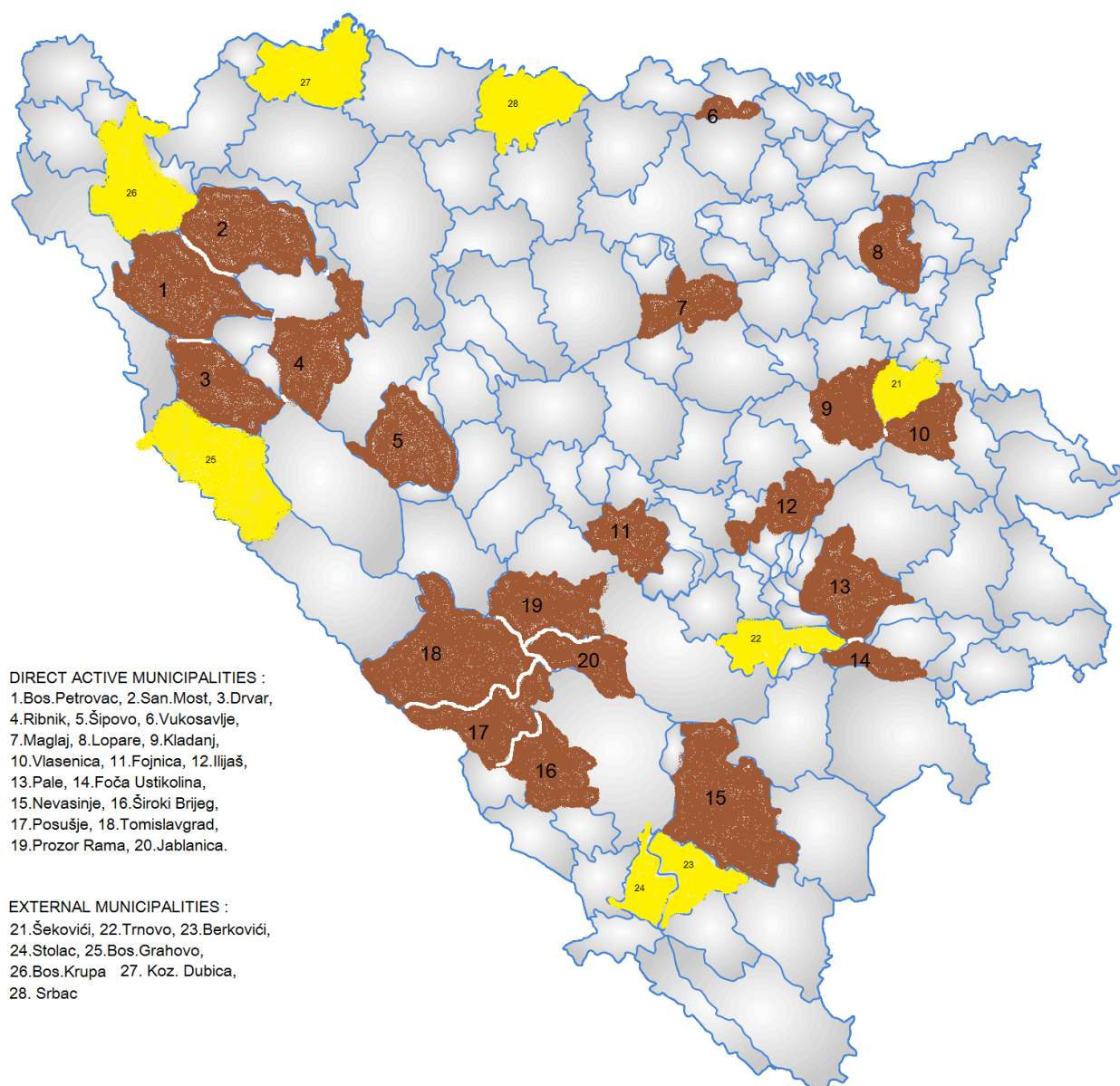
PEP emphasized having a sufficient number of villages to secure the sustainability of the processes implemented. Therefore it was agreed that the project should be applied in 15% of all municipalities nationwide rather than regionally and target less developed rural areas in an attempt to address the poorer communities. Invitations were issued to twenty-four municipalities that had been categorized as under developed according to official statistics and they were essentially spread across the whole area of Bosnia & Herzegovina, twenty signed formal agreement with PEP.

Within each of the twenty municipalities, 3-7 villages were invited to directly participate, in total 100 villages. PEP then selected another forty-five neighboring villages from within the partner municipalities to participate in a baseline study as well as additional nineteen villages from municipalities external to the PERA project. The same applied for targeted villages as in every municipality 15% of villages were involved (PEP International, 2012).

Table 1 illustrates the partner and external Municipalities and the number and status of villages within each Municipality.

Partner Municipalities	Active Villages	Neighboring Villages	External Municipalities	External Villages
Bosanski Petrovac	5	2	Berkovici	3
Drvar	6	2	Bosanski Krupa	3
Foca-Ustikolina	3	1	Bosansko Grahovo	3
Fojnica	5	2	Sekovici	1
Ilijas	6	2	Stolac	4
Jablanica	5	4	Trnovo	5
Kladanj	7	2		
Lopare	6	2		
Maglaj	4	3		
Nevesinje	6	2		
Pale	4	3		
Posusje	5	2		
Prozor-Rama	4	2		
Ribnik	7	2		
Sanski Most	4	2		
Sipovo	4	4		
Siroki Brijeg	5	2		
Tomislavgrad	5	3		
Vlasenica	4	2		
Vukosavlje	5	1		
<b>Total</b>	<b>20</b>	<b>100</b>	<b>6</b>	<b>19</b>

**Table 1; Partner and external Municipalities and number and status of villages within each Municipality.**



**Picture 1; Bosnia and Herzegovina and the municipalities that are active in the PERA project (brown) and external in the PERA project (yellow) (PEP International, 2012)**

### **3.1.2 Engagement of municipal officials**

Municipal officials were included and directly participated in all projects and field activities within the project on daily bases to secure the continuity and dissemination of the experience gained in the project on the assumption that;

- The municipalities were interested in having access to information about how the project would be applied and the conditions and desires of their citizens.
- By direct engagement the municipal officials would gain knowledge and interest to maintain and disseminate the experience from the project within their municipality (PEP International, 2012).

Every municipality appointed 2-3 people from their administration team to take part in the project. In most cases those assigned had a direct role in municipal development departments or other offices that had communication with citizens as their main objective. In all the municipalities engaged in PERA, a number of organizations had already applied a capacity building project to strengthen the local governments. Despite that fact PEP found very few indicators suggesting that these efforts had yielded any real capacities to the administrative workers engaged with PERA. The outcome of PERA capacity building activities seems therefore to depend on the willingness or capability of the municipal authorities to engage these people in activities where their knowledge could be fully explored.

### **3.1.3 Open village meetings**

Invitations for open meetings were part of the transparency orientation in the PERA project with non-discrimination and inclusion of all citizens. In every village an invitation was published and citizens were encouraged to participate and listen and comment on the introduction of the project idea. This resulted in around 20-30% of all adult citizens attending the meetings and receiving information and actively participating in discussions on the intention and practicalities for the project.

### **3.1.4 Project Cycle Management training**

Project Cycle Management (PCM) training was applied in 4 steps, which was believed to have a practical purpose, not only for the village's workgroups but also for individuals who might consider other more economically oriented projects. The PCM training was applied in a simplified version to give a basic idea regarding the organization of the projects and their implementation, essentially to ensure that individuals had a basic knowledge of PCM, that is the formalities of communication, analysis of the strengths, weaknesses, opportunities and threats of projects (SWOT), the project planning and the project financial management.

### **3.1.5 Stepwise process**

From the one hundred villages targeted by PERA four had already withdrawn within few weeks from the project due to distrust towards each other.

The remaining 96 villages maintained a formal cooperation with PEP and went through process of capacity building activities. These activities focused on:

- Establishing formalities around citizens gatherings, how to structure agendas for meetings, invitations, divide tasks for meetings, maintaining meeting minutes, and informing about results.

- Problem identification and prioritization, through simple SWOT analysis.
- Project planning, by applying project cycle management training.
- Financing and finance control, introducing simple accounting systems, different requirements by finances, and finance reporting
- Monitoring and evaluation of actions, by introducing formats for monitoring and reporting.

All main decisions regarding the cooperation with PEP and the internal organization within each village were established at an openly published village meeting where up to 40% of all inhabitants attended. The PERA project decided to offer small grants of € 5.000 for each village that completed the process (PEP International, 2012). To obtain these funds a series of activities had to take place; the identification and prioritization should be based on general consensus among the villagers of each village. The planning and preparation for each project is lead by the village and all the main decisions are made by the citizens themselves. PEP emphasized that each idea should focus on joint and non-discriminatory benefits for the whole community and for them to develop their own ideas on what is of vital importance for the village and that the whole village would contribute financially to the solution of their idea. PEP's only precondition was that the project should be of public service nature and that the local government would guarantee that legal issues, technical solutions and ownership were clear and acceptable. At these joint meetings every village appointed a workgroup to lead the process regardless of their village organization before<sup>2</sup>. Each work group was selected at an "open villages meeting" to secure a productive cooperation between the village and their municipality. The workgroup normally consisted of seven to ten people.

The main methodological characteristics was a clear bottom up approach, and a continuous presences in the village over a period of three years and direct engagement and dialogue with selected representatives from each of targeted municipalities. PEP applied a stepwise approach, providing information and training for all villages before moving on to the next steps.

A baseline study was performed by PEP prior to its intervention to measure if there would be any changes during the project. The baseline study was performed in all 100 active villages, forty-five neighboring and nineteen external villages. Two follow-up studies were performed, one during the project and the last one at the end of the project, using the same questionnaire in the same villages.

During the first year a series of steps had to be taken before a follow-up study was performed. Every step had to be completed before moving on to the next step. The implementation was a lengthy process which began with the introduction of the PERA project, the signing of project agreements and the performance of a baseline study. After that the work with the villages started.

- The first step was in project cycle management, formal procedures for conducting meetings and formal communications.

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<sup>2</sup> Some confusion are noted on the different organizational structure of the villages some dated back to the old communist system of Yugoslavia.

- The second step was SWOT analyses and selection of project ideas, including an open meeting about and voting on project ideas.
- The third step was the project planning and finally project finance management.

After the first follow-up study, two to five advisory meetings were held on the project selection, two meetings to monitor the implementation of the projects and finally “handing over” and completion meetings in all villages before the second and last follow-up study.

The third and last year of the PERA project, villages had started on their projects. Different types of projects were chosen including some environmental such as organizing garbage pickups or buying garbage containers, fixing water tanks or pipes or as in some villages the sewage system was repaired or closed. Other villages chose projects like, reconstruction of the roads in or to the village, repairing or building a community center or asphaltting of a sports ground as an example.

## **3.2 Measurements of the PERA project**

PEP International concluded that a project of this nature requires a sophisticated measurement system to show whether the intended effects were obtained (PEP International, 2012). Therefore a baseline study was performed in all the villages included in the study before the project started and follow-up studies were performed both in 2010 and 2011. In addition to the yearly survey, interviews were conducted with contact persons from the municipalities and village’s workgroups.

PEP International plans to continue measuring the effects of the PERA project in Bosnia and Herzegovina for a few more years although the project is formally finished.

## **4 Research methods and analysis**

Does the PERA project, applied by PEP International in strengthening the local decision making process, enhance environmental awareness and action?

In this chapter the methodology used to answer the research question will be defined. To begin with the quantitative research methods will be defined, describing in detail the structure and the implementation of the questionnaires as well as an analysis of the survey. Qualitative research methods will then be defined, including a detailed description of the semi-structured interviews with focus groups.

Quantitative research is based on the idea that social phenomena can be quantified, measured and expressed numerically (Fowler, 2009). Qualitative researchers aim to gather an in-depth understanding of human behavior and the reasons that govern such behavior (Mack & Woodsong, 2005). The key difference between quantitative and qualitative methods is their flexibility. Quantitative methods are somewhat inflexible, such as surveys and questionnaires where the researchers ask all participants the same questions in the same order. Qualitative methods are more flexible, and are not necessarily worded in exactly the same way with each participant. By combining the two methods, a much richer understanding can be obtained. In other words, using an accurate design the quantitative methods can identify what works, while the qualitative methods can identify how it works (Condelli & Wrigley, 2004; Mack & Woodsong, 2005).

### **4.1 Quantitative research**

In the year 2009 PEP performed a baseline study by a survey sent to three types of villages with follow up studies in 2010 and 2011;

- Villages that were to participate in the PERA project for the next three years
- Villages that were in the neighboring vicinity to the active villages and
- Villages further away or completely external to the active villages of the PERA project.

The objective of the survey was to measure the process of the PERA project and to confirm that the intended aim had been achieved. A baseline study is performed prior to an intervention to measure if there are any changes over a certain period of time (Church & Rogers, 2006).

The questionnaire (see Appendix 1) had thirty-five questions plus some profile questions. The questionnaire was meant to measure changes in and between active, neighboring and external villages, and to measure the progress towards identified goals of the PERA project. It was divided into three parts;

- Local community engagement, information sharing and participation.
- Local government – claims by citizens, replies and financial support.
- Environmental protection awareness.

The null hypothesis evaluated is that there is no statistical difference between active, neighboring and external villages in answers over the three-year period and therefore no traceable influence of the PERA project. If a significant statistical difference is found between the villages during the three year study, it could be taken as a sign of a significant impact of the PERA project.

A convenience sample was used for the baseline study (Davies, 2007), where a resident of each village was randomly chosen to answer the questionnaire. Interviewers would go out to every active, neighboring and external village. Since the surveys were performed during summer, many people were out doors. PEP staff randomly asked those people to participate in the survey. During cold or rainy days people spent considerable time indoors so the interviewers had to visit their homes in order to get individuals to participate. People assigned to the work group of the PERA project would not be interviewed.

The baseline study targeted 1.563 persons randomly selected from the three groups; active, neighboring, and external. On the 2010 follow-up survey, 1.837 persons were interviewed and 1.835 in 2011. Few neighboring and external villages were added to the survey during the follow up studies. For this research those villages were not included in the survey making the total number of participants 4680, 1563 from 2009, 1575 from 2010 and 1542 from 2011. The largest part of the sample was comprised of residents of the 96 active villages. The target was to collect answers from all age groups and as even percentage as possible of women and men.

Table 2 illustrates the distribution of the participants by age, gender and location.

2009		Age group					Gender	
	Participants	Under20	20-35	35-50	50-65	Over 65	Male	Female
Active	63% - 985	3,6%	21,6%	35,6%	28,5%	10,7%	57%	43%
Neighboring	26% - 406	2,7%	18,5%	36,5%	31,8%	10,6%	52%	48%
External	11% - 172	0%	16,9%	30,1%	35,5%	17,5%	60%	40%

**Table 2; The distribution of participants in the baseline study 2009 by age, gender and location.**

Of the 1563 participants in the baseline survey during the first year, 63% of them were residents of active villages, 26% from neighboring villages and 11% from external villages. The percentage of participants under the age of 20 was 3.6% in the active villages, 2.7% in neighboring and none in the external villages. 21.6% of the participants in active villages were in the age group 20-35, 18.5% in the neighboring villages and 16.9% in the external villages. Of the participants in the active villages 35.6% of them were in the age group 35-50, in the neighboring villages 36.5% and 30.1% in external villages. In the age group of 50-65, 28.5% were in the active villages, 31.8% in the neighboring villages and 35.5% in the external villages. The percentage of participants over 65 was 10.7% in the active villages, 10.6% in the neighboring and 17.5% in the external villages. The gender was divided as follows; 57% male and 43% female in the active villages, 52% were male

and 48% female in the neighboring villages and 60% male and 40% female in external villages.

Table 3 illustrates the distribution of participants in the follow up study during the year 2010.

2010		Age group					Gender	
	Participants	Under 20	20-35	35-50	50-65	over 65	Male	Female
Active	63% - 985	2,6%	20,9%	38%	30%	8,5%	53%	47%
Neighboring	26% - 406	3,1%	15,9%	35,2%	35,4%	10,4%	49%	51%
External	11% - 172	1,8%	18,5%	32,1%	34,5%	13,1%	55%	45%

**Table 3; The distribution of participants in the follow-up study in the year 2010 by age, gender and location.**

Of the 1575 participants in the follow up survey during the second year 2010, 63% of them were residents of active villages. 26% were from neighboring villages and 11% from external villages. The percentage of participants under 20 was 2.6% in the active villages, 3.1% in neighboring and 1.8% in the external villages. 20.9% of the participants in active villages were in the age group 20-35, 15.9% in the neighboring villages and 18.5% in external villages. In the active villages 38% of the participants were in the age group 35-50, 35.2% in the neighboring villages and 32.1% in external villages. In the age group 50-65 were 30% of the participants in active village, 35.4% in the neighboring villages and 34.5% in the external villages. Percentage of participants in the age group 65 over was 8.5% in the active villages, 10.4% in the neighboring villages and 13.1% in the external villages. The gender was divided as follows; 53% male and 47% female in the active, in the neighboring villages 49% were male and 51% female and 55% male and 45% female in external villages.

Table 4 illustrates the distribution of participants in the third survey during the last year of the PERA project.

2011		Age group					Gender	
	Participants	Under 20	20-35	35-50	50-65	over 65	Male	Female
Active	63% - 985	2,5%	17,1%	38,0%	31,0%	11,4%	55%	45%
Neighboring	26% - 406	2,9%	17,2%	28,5%	33,7%	17,7%	56%	44%
External	11% - 172	1,8%	16,1%	26,8%	35,1%	20,2%	54%	46%

**Table 4; The distribution of participants in the follow-up study in the year 2011 by age, gender and location.**

Of the 1542 participants in the follow up survey during the last year 2011, 63% of them were residents of active villages. 26% were from neighboring villages and 11% from external villages. The percentage of participants under 20 was 2.5% in the active villages, 2.9% in neighboring villages and 1.8% in the external villages. 17.1% of the participants in active villages were in the age group 20-35, 17.2% in the neighboring villages and 16.1% in external villages. Of the participants in the active villages 38% of them were in the age group 35-50, in the neighboring villages 28.5% and 26.8% in external villages. In the age group 50-65 were 31% of the participants in active village, 33.7% in the neighboring villages and 35.1% in the external villages. The percentage of participants in the age group 65 over was 11.4% in the active villages, 17.7% in the neighboring villages and 20.2% in

the external villages. The gender was divided as follows; 55% male and 45% female in the active villages in the year 2011. In the neighboring villages 56% were male and 44% female and 64% male and 46% female in external villages.

Although the participants are not evenly divided between age groups, answers from all age groups were collected as targeted except in the external villages in 2009, as there were no participants from the age group under 20. The difference in percentage between the genders every year was so little it was regarded as irrelevant.

The answers to the questionnaire were entered into SPSS program, which was then used to calculate the chi-square given in the results chapter.

The chi-square is an appropriate method to find out if there is a statistical difference between the factors measured (Kleinbaum, Kupper, & Muller, 2007), for example if there is a significant statistical difference between the answers given about village cleaning in active, neighboring and external villages through the years, which would mean that the null hypothesis was rejected.

The chi-square or  $\chi^2$  is the sum of the squared difference between observed and the expected data, divided by the expected data in all possible categories. (Kleinbaum, et al., 2007)

Degrees of freedom (df) factors into the calculations of the probability of independence. Once a Chi-square value is calculated, this number and the degrees of freedom are used to decide the probability, or p-value, of independence. (Kleinbaum, et al., 2007)

The N is the total sample size.

The probability (p value) is that the deviation of the observed from that expected is due to chance alone. If the p value for the calculated  $\chi^2$  is  $p < 0.05$ , the hypothesis can be rejected and some factor other than chance is operating for the deviation to be so great. For example, a p value of 0.01 means that there is only a 1% chance that this deviation is due to chance alone, therefore, other factors must be involved. (Kleinbaum, et al., 2007).

By analyzing this data it is easy to see if there have been any changes in actions taken in the villages, if there is an increase or decrease in actions taken or if there are no changes during the three year study period. Questions such as:

- Do you think your village has a problem with pollution?
- Is your drinking water regularly tested for pollution?
- Does your village organize a regular cleaning of the village area?

These questions can help answering the research question. If there is an increase in actions taken in active villages and there is a statistical difference in action between active, neighboring and external villages every year concerning those environmental issues the null hypothesis can be rejected. The difference in action in villages through the years is not studied here since too many external factors would have to be included in the calculation and that was beyond the scope of this study.

## 4.2 Qualitative research

Questionnaires can only give a limited insight into people's opinions and perspectives. Therefore an in-depth interview was performed to give the insight needed to understand the answers given in the questionnaires.

Thus, semi-structured interviews were carried out. In such interviews a guide is provided, with questions and topics that must be covered; the questions are standardized, and probes may be provided to ensure that the researcher covers the correct material. These kinds of interviews are often used when the researcher wants to dig deeply into a topic and to understand thoroughly the answers provided (Davies, 2007; Harrell, Bradley, Corporation, & Institute, 2009). The interviews were carried out with focus groups in ten active villages in the PERA project. Focus groups are dynamic group discussions used to collect information, and generally include between three and twelve participants (Harrell, et al., 2009).

Initially sixteen villages were chosen for the focus group interviews, four withdrew because of road construction and holidays, and two villages did not manage to gather enough people for the interviews.

Villages chosen for the focus groups were randomly picked but intentionally situated in different parts of Bosnia and Herzegovina. The focus groups consisted of three to ten people who all belonged to the PERA working groups.

Interviews were held at the usual meeting place of the working groups, usually at a community center. The interviews were conducted in Bosnian with the help of an interpreter who was a field officer in the PERA team and therefore familiar with all the working groups. The interpreter was instructed to translate everything, all jokes, all comments and every little thing even if it was considered of no importance. Interviews were also audio-recorded so the interpreter could fill in later on if some translation was missing. That turned out to be unnecessary.

A questionnaire was structured before the interviews as a guideline. No interview was the same and questions were sometimes altered for the flow of the interview. As an example questions were asked in different order if the researcher found the interview going towards a topic later in the questionnaire. Interviewees were sometimes asked to explain their case better and sometimes questions were dropped if the topic had already been discussed.

During the interviews a special notice was given to the series of coded words and phrases; pollution, problem, future project, health, environmental awareness, and environment/al. Interviews were analyzed, focusing on these coded words and phrases with the research question in mind. Answers and comments with reference to the coded word or phrases and connected to the research question were later drawn out of the interview for a closer look in the results chapter from the interviews.



# 5 Results

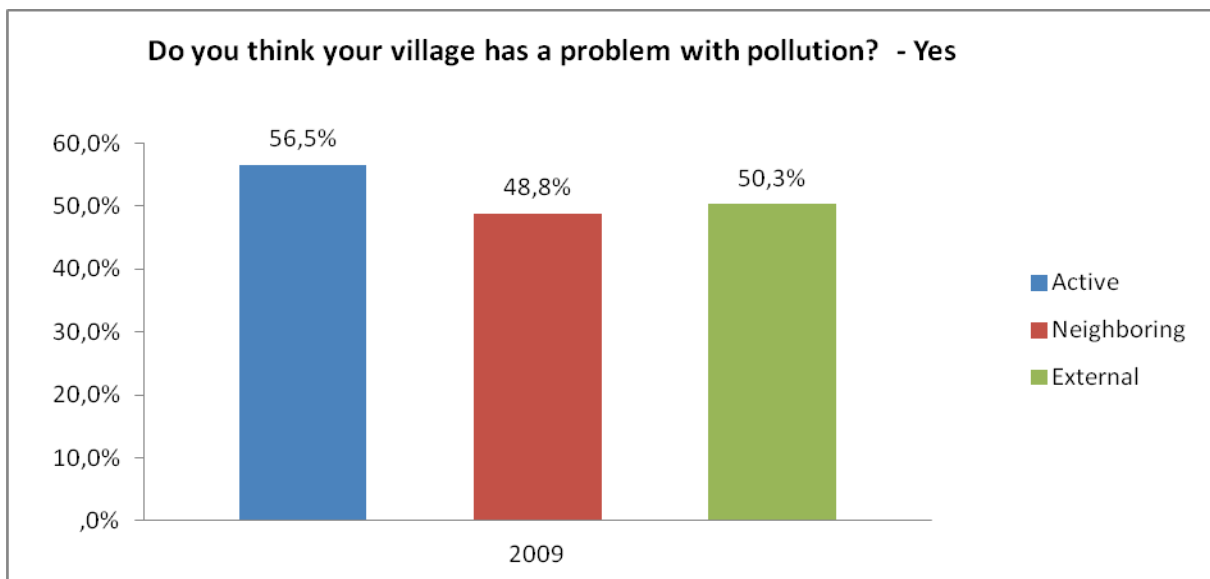
## 5.1 Results: Questionnaire

In the questionnaire seven questions are linked to environmental protection awareness and in this chapter answers to three of the questions that captured the subject of this research the best, have been put up in graphs for a closer look at the difference in answers between the villages every year. The first one is an opinion oriented question but other two are questions about actions in the villages and the graphs show the changes that occur between the years of the study. The answer “I don’t know” was counted as being a missing value since the percentage of that answer was so low it did not have any influence on the results.

### 5.1.1 Do you think your village has a problem with pollution?

The first section outlines the affirmative answers from all villages to the first question taken from the questionnaire separated by the year.

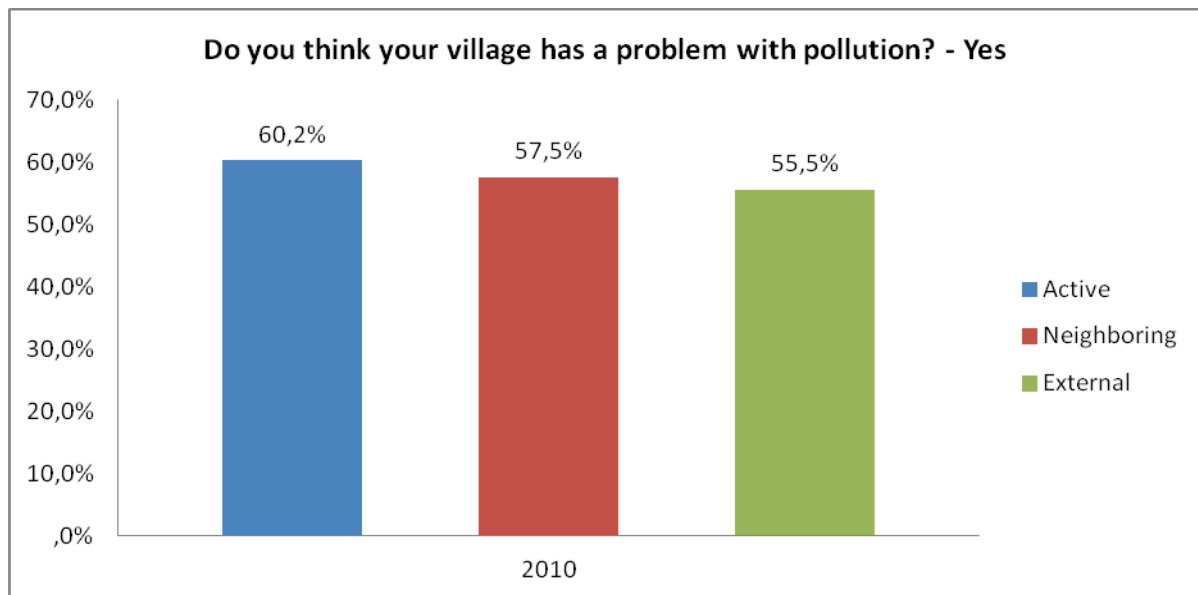
Figure 1 demonstrates the affirmative answers from all villages during 2009 to the question: Do you think your village has a problem with pollution?



**Figure 1; The percentage of participants in 2009 who answer “yes” to the question; do you think your village has a problem with pollution?**

In the year 2009 out of 972 participants in the active villages 56.5% consider their village as having a problem with pollution. 48.8% of the 400 participants in the neighboring villages and 50.3% of the 163 participants in the external villages answered yes.

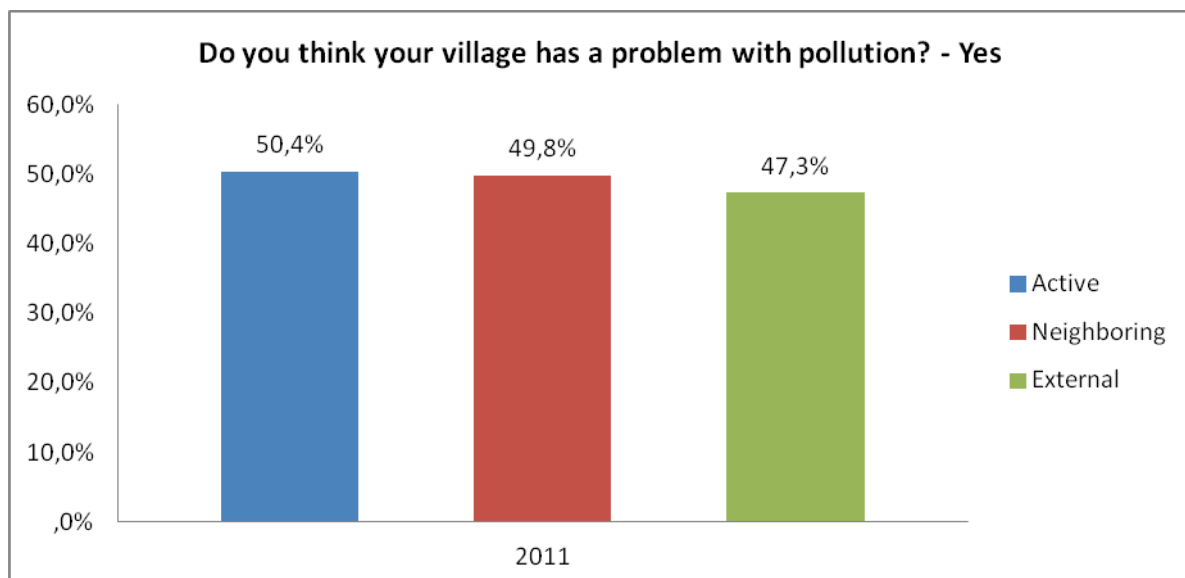
Figure 2 demonstrates the affirmative answers from all villages during 2010 to the question: Do you think your village has a problem with pollution?



**Figure 2; The percentage of participants in 2010 who answered “yes” to the question; do you think your village has a problem with pollution?**

60.2% of the 978 participants in the active villages answer yes to the question if their village has a problem with pollution in 2010. 57.5% of the 409 participants in the neighboring villages and 55.5% of the 164 participants in the external villages answer yes to this question.

Figure 3 demonstrates the affirmative answers from all villages during 2011 to the question: Do you think your village has a problem with pollution?



**Figure 3; The percentage of participants in 2011 who answer “yes” to the question; do you think your village has a problem with pollution?**

In the final year of the PERA project in 2011 50.4% of the 949 participants in the active villages answer affirmatively. In the neighboring villages 49.8% of the 402 who participated and 47.3% of the 165 participants in the external villages answer yes.

Table 5 shows combined results from graph 1, 2, and 3.

	2009	2010	2011
Active	56,5%	60,2%	50,4%
Neighboring	48,8%	57,5%	49,8%
External	50,3%	55,5%	47,3%

**Table 5; Combined results from the graphs with answers to the question; Do you think your village has a problem with pollution?**

The results from the chi-square test are as follows;

2009 ( $\chi^2 = 7,716$ ;  $df = 2$ ;  $N = 4602$ ;  $P \leq 0,021$ )

2010 ( $\chi^2 = 1,845$ ;  $df = 2$ ;  $N = 4602$ ;  $P \leq 0,397$ )

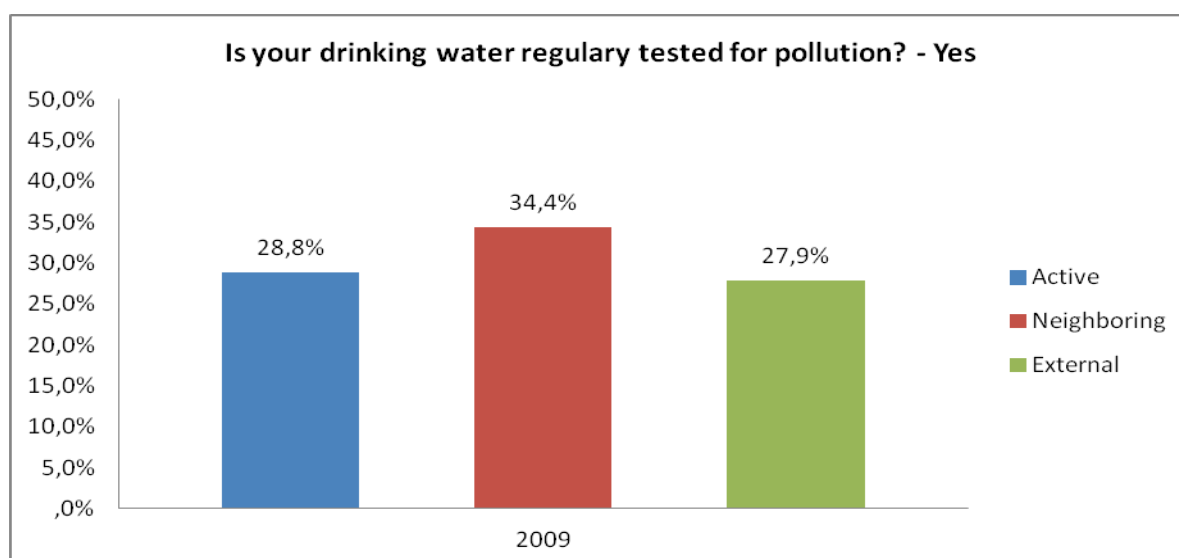
2011 ( $\chi^2 = 0,542$ ;  $df = 2$ ;  $N = 4602$ ;  $P \leq 0,763$ )

This chi-square test shows a statistically significant difference between villages during first year of the baseline study since the P value is less than 0.05 but otherwise there is no statistical difference during 2010 and 2011 since the P value is greater than 0.05 and therefore the results support the null hypothesis.

### 5.1.2 Is your drinking water regularly tested for pollution?

This section outlines the affirmative answers from all villages to the second question taken from the questionnaire separated by the year.

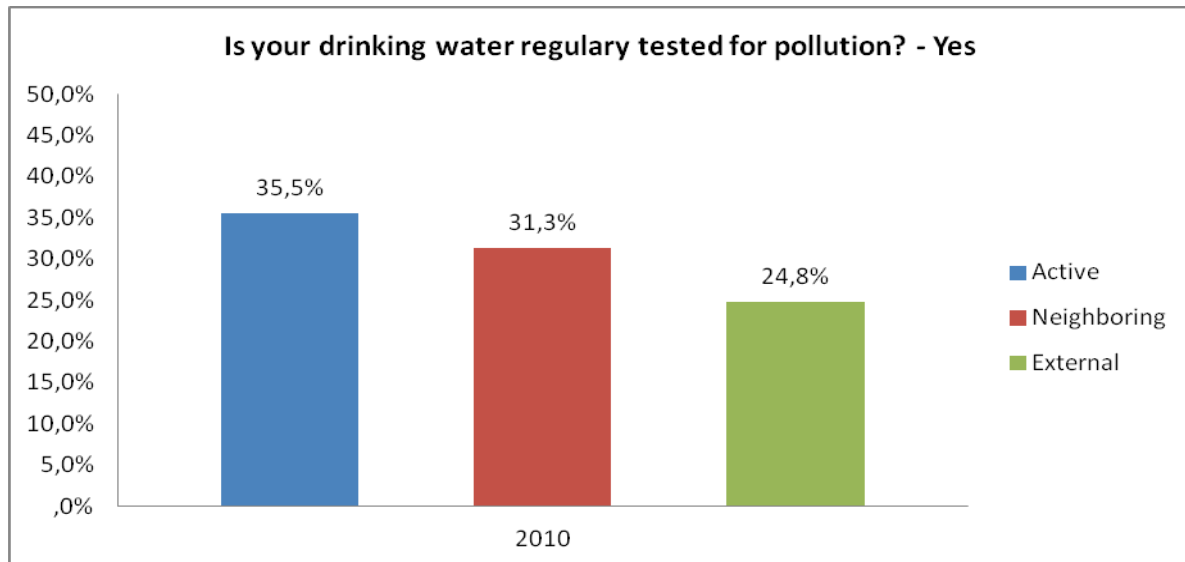
Figure 4 demonstrates the affirmative answers from all villages during 2009 to the question: Is your drinking water regularly tested for pollution?



**Figure 4; The percentage of participants in 2009 who answer "yes" to the question; is your drinking water regularly tested for pollution?**

In the year 2009 28.8% of the 888 participants in the active villages claim their water is regularly tested for pollution. 34.4% of the 358 participants in the neighboring villages answer affirmatively and 27.9% of the 147 participants in external villages.

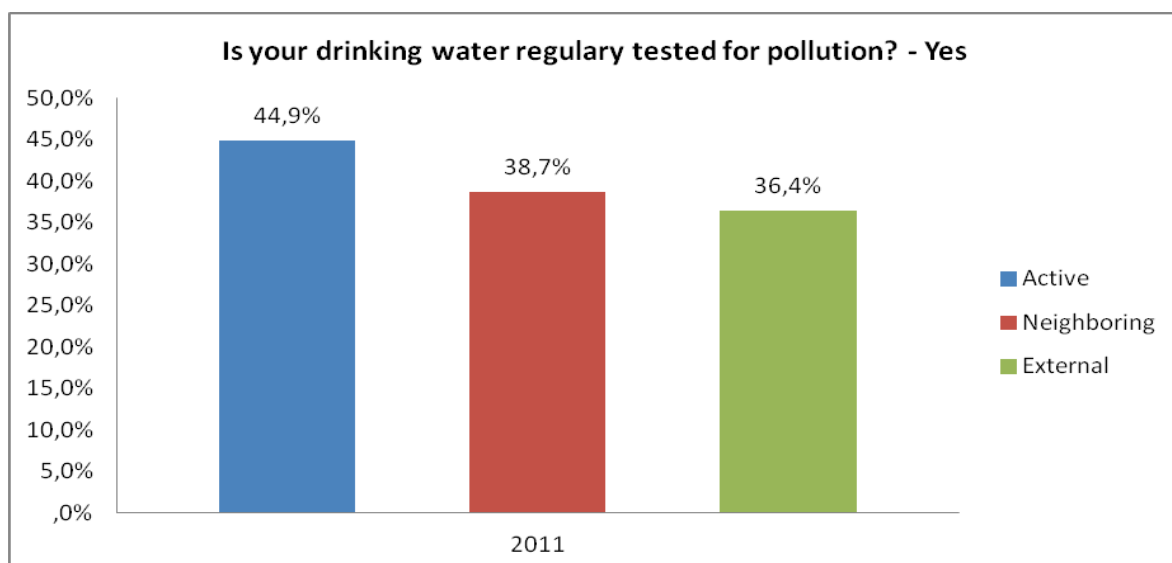
Figure 5 demonstrates the affirmative answers from all villages during 2010 to the question: Is your drinking water regularly tested for pollution?



**Figure 5; The percentage of participants in 2010 who answer “yes” to the question; is your drinking water regularly tested for pollution?**

In 2010, 35.5% of the 865 participants in active villages answer yes to the question: is your drinking water regularly tested for pollution. 31.3% of the 367 participants in neighboring villages answer the question affirmatively and 24.8% of the 153 participants in the external villages.

Figure 6 demonstrates the affirmative answers from all villages during 2011 to the question: Is your drinking water regularly tested for pollution?



**Figure 6; The percentage of participants in 2011 who answer “yes” to the question; is your drinking water regularly tested for pollution?**

In 2011 44.9% of the 873 participants in active villages claim their water is tested regularly for pollution. 38.7% of the 367 participants in the neighboring villages answer yes to this question and 36.4% of the 140 participants in the external villages claim their water is regularly tested for pollution as well.

Table 6 illustrates combined results from graph 4 through 6.

	2009	2010	2011
Active	28,8%	35,5%	44,9%
Neighboring	34,4%	31,3%	38,7%
External	27,9%	24,8%	36,4%

**Table 6; Combined results from the graphs with the answers to the question; Is your drinking water regularly tested for pollution?**

The results from the chi-square test are as follows:

2009 ( $\chi^2 = 4,102$ ;  $df = 2$ ;  $N = 4158$ ;  $P \leq 0,129$ )

2010 ( $\chi^2 = 7,447$ ;  $df = 2$ ;  $N = 4158$ ;  $P \leq 0,024$ )

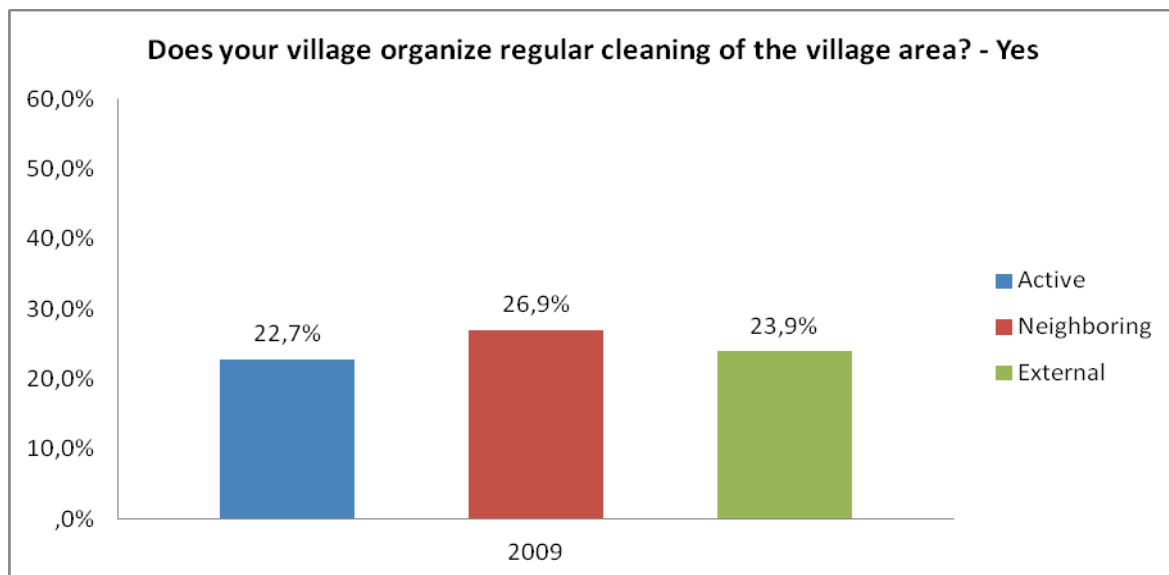
2011 ( $\chi^2 = 6,349$ ;  $df = 2$ ;  $N = 4158$ ;  $P \leq 0,042$ )

The chi-square test shows no significant difference in the year 2009 between villages since the P value is greater than 0.05. However in the year 2010 and 2011 the chi-square test shows a statistically significant difference between villages as the P value is less than 0.05. This shows that there is a difference between active, neighboring and external villages during this three-year study during 2010 and 2011.

### 5.1.3 Does your village organize regular cleaning of the village area?

This section outlines the affirmative answers from all villages to the third question taken from the questionnaire separated by the year.

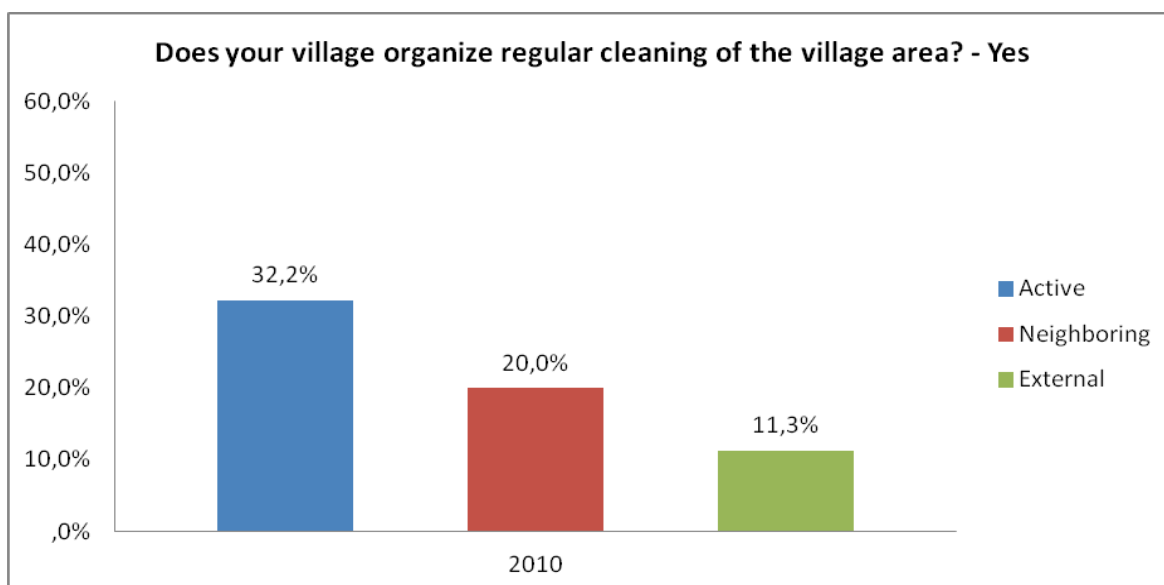
Figure 7 demonstrates the affirmative answers from all villages during 2009 to the question: Does your village organize regular cleaning of the village area?



**Figure 7; The percentage of participants in 2009 who answer “yes” to the question; does your village organize regular cleaning of the village area?**

In 2009, 22.7% of the 972 participants in the active villages say that there is organized regular cleaning of their village area. 26.9% of the 401 participants in the neighboring villages claim they organize regular cleaning of village area and 23.9% of the 163 participants in external villages answer affirmatively.

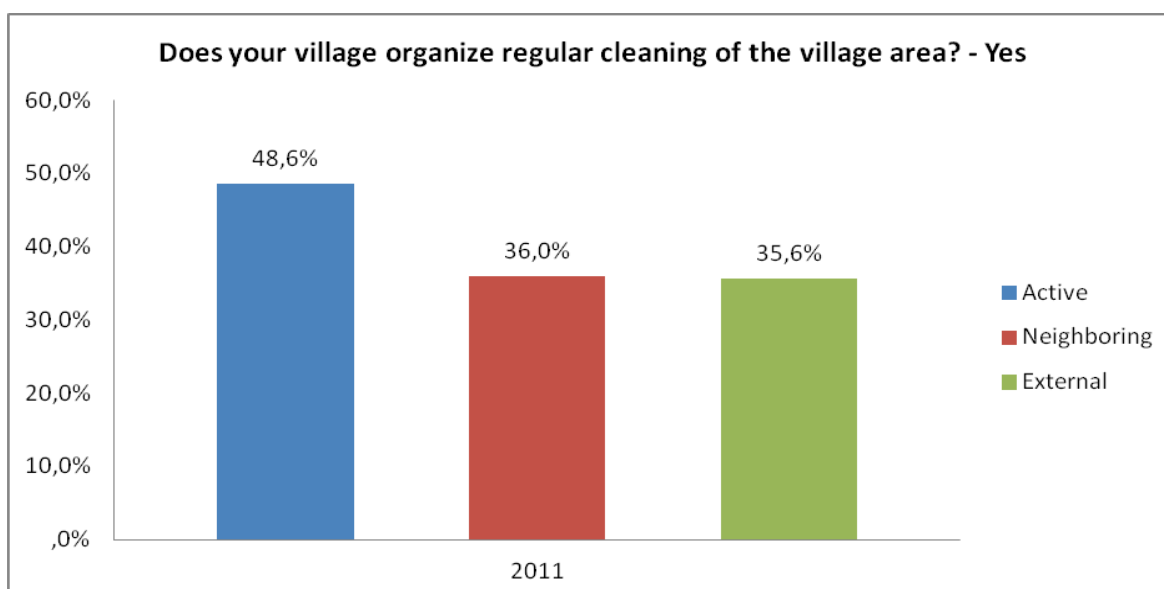
Figure 8 demonstrates the affirmative answers from all villages during 2010 to the question: Does your village organize regular cleaning of the village area?



**Figure 8; The percentage of participants in 2010 who answer “yes” to the question; does your village organize regular cleaning of the village area?**

In 2010 32.2% of the 976 participants in the active villages claim that the village organizes cleaning of the village area. 20.0% of the 406 participants in neighboring villages answer affirmatively as well 11.3% of the 168 participants in the external villages.

Figure 9 demonstrates the affirmative answers from all villages during 2011 to the question: Does your village organize regular cleaning of the village area?



**Figure 9; The percentage of participants in 2011 who answer “yes” to the question; does your village organize regular cleaning of village area?**

In 2011, 48.6% of the 956 participants in the active villages claim there is regular cleaning of their village area. 36.0% of the 400 participants in neighboring villages and 35.6% of the 160 participants who claim there is organized regular cleaning of the village area,

Table 7 shows the combined results from graphs 10 through 12.

	2009	2010	2011
Active	22,7%	32,2%	48,6%
Neighboring	26,9%	20,0%	36,0%
External	23,9%	11,3%	35,6%

**Table 7; Combined results from the graphs with the answers to the question; Does your village organize regular cleaning of the village area?**

The results from the chi-square test are as follows;

2009 ( $\chi^2 = 2,744$ ;  $df = 2$ ;  $N = 4602$ ;  $P \leq 0,254$ )

2010 ( $\chi^2 = 44,705$ ;  $df = 2$ ;  $N = 4602$ ;  $P \leq 0,001$ )

2011 ( $\chi^2 = 23,303$ ;  $df = 2$ ;  $N = 4602$ ;  $P \leq 0,001$ )

The chi-square test shows no significant differences between villages in the year 2009 since the P value is greater than 0.05. In the year 2010 and in 2011 the chi-square test shows statistically significant difference between villages as the P value is less than 0.05. This shows that there is a difference in answers given between active, neighboring and external village which shows that active villages are changing differently due to the PERA project.

By comparing villages, active, neighboring, and external, a significant statistical difference is found. Although for the first graphs with answers to the question, if people think their village has a problem with pollution, a very similar outcome is shown in all villages. Although people in all villages seem to be divided almost in half on whether they think there is a problem with pollution in their village, actions in village cleaning have increased. Village cleaning is gradually increasing every year of the study in active villages. Neighboring and external villages do not show the same trend; in both cases the second year shows a decrease in village cleaning, however during the last year cleaning increases in both villages. There is a significant statistical difference in actions between the active, neighboring and external villages every year of the study and therefore the null hypothesis can be rejected.

The same story goes regarding the question if the drinking water is regularly tested for pollution. The active villages show a gradual increase in action during the three year study. In the neighboring and external villages there is a decrease in actions regarding the water during the second year of the study. Again there is a substantial increase concerning water testing for both neighboring and external villages during the last year of the study. The significant statistical difference between the villages in second and third year of the study show clearly that there is an additional factor controlling the gradual increase of action in the active villages. The increase in actions taken during the last year in both neighboring and external villages can indicate a spill-over effect from the active villages and the PERA project.

## 5.2 Results: Interviews

Interviews with focus groups were held in 10 different villages all active in the PERA project. The participants of the focus groups were all people from the working groups in the PERA project.

Village	Municipality	Participants	Project
<b>Donja Britvica</b>	Siroki Brijek	10	Repairing the road
<b>Gornji Crnac</b>	Siroki Brijek	4	Repairing the road
<b>Goletici</b>	Kladanj	3	Repairing the road
<b>Modridski Lug</b>	Vukosavlje	3	Sports ground
<b>Otigosce</b>	Fojnica	3	Repairs of water tank
<b>Dragasevac</b>	Vlasenica	3	Bus stops and trash cans
<b>Piskavice</b>	Vlasenica	4	Construction
<b>Smajlovici</b>	Fojnica	4	Construction
<b>Donja Ribnik</b>	Ribnik	5	Construction
<b>Ravna</b>	Jablanica	5	Construction

Questions vary between villages during the course of the interview but the main structure was kept the same. The goal with these interviews was to gain a better insight into the opinion of the villagers in the active villages concerning the PERA project and environmental matters and to see if there were any reliable connections there between. Interviewees are numbered and that number used to identify who is answering or speaking during the interview. Here are all the interviews disclosed in its entirety.

**The main questions are as follows;**

- Has the PERA project in any way changed the way you see your village or what needs to be done?

How?

- Did you have plans to start or would you have started this project without PERA or PEP?
- Have you made an attempt to tackle this problem before?
- For your next project, what do you think would be most important for you and your village?

Why?

- In your opinion, what causes pollution?
- Are there any of those factors here in your village?
- If yes, do you think they need to be tackled?
- What are the main benefits of the project PERA? How will you use those benefits in the future?
- How is the overall health in you village? (Discuss)
- How is the health of young children here?
- Do you test your water for pollution?
- How?
- Do you get reports about the water quality?
- In your opinion do you think the environmental awareness has increased since the PERA project?

### **5.2.1 Interview in Donja Britvica**

**Their project during the PERA project was an asphalt-repair of a 370m long road.**

**The focus group was structured as follows;**

1. A man in his forties – a worker
2. A woman in her fifties - housewife
3. A woman in her thirties - housewife
4. A woman in her thirties - housewife
5. A woman in her twenties - unemployed
6. A man in his twenties - unemployed
7. A boy teenager
8. A boy teenager
9. A girl teenager
10. A man in his fifties – unemployed

**Not all participated or answered questions during the interview.**

**Has the PERA project in any way changed the way you see your village or what needs to be done here in your village?**

3. Yes, the people think differently now and it has changed a lot since PEP.

The people communicate better between themselves and are more organized and the communication with the municipality is much better now.

The awareness of the people has changed, as is the awareness of the project.

**And has that in any way changed how you see what needs to be done?**

4. Yes, since this project started and finished other problems have been solved, like garbage disposal has been organized, we have a container now and once a week we have garbage pickup, the playground for the kids and the area around the church was cleaned.

Everything started after the PERA project, we are more aware and more active and now we have sent claims to Sarajevo. During spring we are going to send request to the federal ministry to clean the environment around the playground for the kids.

2. Everything started after PERA

**Did you have plans to start before the PERA project?**

3. We had plans to fix the steps to the church before PEP.

1. But after PEP we got the idea about the garbage containers, it started after PEP, when fixing the playground we got the idea to get containers and clean up the trash. Before everyone threw away the trash everywhere but we solved that with getting containers and we are the only village that has containers. And the municipality now helps with cleaning up around where the trash usually was thrown.

**Have you thought about other projects for the village or what has the most priority?**

1. Well we really need to fix the playground and also to start a project to fix the school because it is not so good, the water is a problem here<sup>3</sup>

4. We have to push after the claims and keep on sending requests because the Ministry for Education is supposed to help us with this problem

1. But we have a problem with the garbage right at the entry of our village, the thing is it easy to solve the problem in our village now because we have containers, but at the village entrance people from other villages and from the city throw away their garbage. We have to continue communicating with other villages so they will stop throwing the garbage where we have been cleaning it away.

The problem during the summer because of the heat and the sun the garbage there does smell a lot and we have heard that other villages have also started talking about it so our communication has started to work.

2. We are going to solve it even if we have to sit there during the night and take pictures of the ones throwing away the garbage and post it so that they will stop.

**So in your opinion what are the main causes of pollution?**

1. That is, the garbage

3. There is also a factory close by that causes pollution and they also throw garbage near our village even.

**How about the drinking water where are you getting that from?**

4. We buy water from the source river, we buy huge tanks each household buys its own tank but we also use rainwater and that is really our water resource so if there is a dry spell we buy water tanks.

**And do you test your water for pollution?**

2. Each household can decide if they test their water but that is their decision.

3. But we just assume that the water that we buy in tanks is tested but sometimes it's good and sometimes it's bad.

1. I think they are definitely testing it

**How is the overall health in your village?**

8. (Laughing) mentally it's not so good

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<sup>3</sup> There is no running water in the school and kids run outside for toilet needs, also the heating is from coal ovens.

3. The biggest problem here is the air because of the factory. But we don't have any problems with health though. Maybe long term the air from the factory will have an influence but short term illnesses because of the air we don't really have.

**What about the young kids or babies?**

1. We really don't have any babies in the village except for the one my wife is having any minute now.

**And do you think that environmental awareness has increased now after PEP came here?**

1. Of course it has increased; we now want to do something about the garbage and are trying our best to solve that problem. We did not even know before that we could actually do something about these garbage issues but now we know we can and that is the biggest change for us.

### **5.2.2 Interview in Gornji Crnac**

**Their project in the PERA project was to fix damaged parts of the road.**

**The focus group was structured as follows;**

1. A man in his fifties- a worker
2. A man in his sixties – a farmer
3. A man in his seventies- unemployed

**Has the PERA project in any way changed the way you see your village or what needs to be done here?**

2. Yes, we had a disastrous road and we have now fixed that with the help of the PERA project. We also have much better communication with everyone in the village and also with neighboring villages and the women are involved now and they have never been involved.

1. Now the women are more interested in working in the village than the men, organization within the village is much better.

**With the women attending the meetings, has it changed the discussions about what needs to be done here?**

1. Mostly it changed in identifying what are our needs, the women agree with us and we agree with them, now we have a common problem.

**Had you started the project before PEP came in?**

2. Yes, we had made plans.

**Had you tried to send in claims for the project?**

2. Yes we have sent a request to the municipality but they never had money for us. We only had promises but nothing ever happens.

**Have you started to think about other projects?**

3. The water supply system needs to be fixed, the pipes need changing and we need to cover the water well. That is the priority

**In your opinion what are the main causes for pollution?**

1. Well the garbage causes the most pollution, wild garbage disposal.

Each neighborhood has their own waste dump but many though burn their trash

**And do you have garbage pickups?**

1. No, we don't

**So in what way is the trash, pollution?**

1. More because we can see the trash, it's all organic, paper and the food we grow ourselves. So mostly it is what we see and it smells.

**Have you tested your water for pollution?**

2. Yes regularly, every two months an inspector comes to check it.

**And do you get the results?**

2. Yes and we have only had good results.

**And the health how is the overall health here?**

3. It's relatively good

**Do you think that people are somehow more environmentally aware here after working with PEP?**

1. Yes. People are not as keen on throwing away trash, and in general the awareness has changed

3. It's seems as if it is a trend now in talking about it at the meetings.

3. We've always had people that had the environment on their mind but they were never involved in the meetings. So now when everyone participates in the meetings these people that were always talking about the environment and no one wanted to listen, they are heard now and people realize what they are talking about.

**So what do you consider to be the main benefits of PERA project?**

2. The best benefit is how to organize and do a project and the connection we now have with the municipality and the democratic way we have now on choosing a project

**Are you going to continue that way?**

1. Absolutely!

### **5.2.3 Interview in Donji Ribnik**

**During the PERA project they build a community hall or a youth hall that could be used for community meetings as well.**

**The focus group was structured as follows;**

1. A woman in her thirties – a housewife
2. A man in his thirties – a farmer
3. A woman in her forties – a housewife
4. A man in his fifties – a farmer
5. A man in his sixties – a worker

**Has the PERA project in any way changed the way you see your village or what needs to be done here?**

2. First of all the people are more involved; we activated them because they were very passive. And we encouraged them to be more involved especially when it came to finance. And people got more involved like we have an electrician in the village that helped in the project and so on.

**Without PEP would you have done the project you did in the PERA project?**

2. We had plans and we had decided on a project but we had no financial resources so we could not do anything without PEP. We were just sitting and waiting for the municipality to help us.

**So you did not attempt to start this project before?**

4. No, because of the financial situation.

**So when this project you are doing with PEP is finished will you continue working on other projects like you worked on this one? Do you have any ideas about other projects?**

3. Yes but this is not finished yet.

**Yes, but when this is finished have you started any discussions about other projects or what needs to be tackled as well here in the village?**

4. Yes we need to do something about our water and we want to start working on our water supply system.

2. Because we have this wild garbage disposal site that is right above our main water source, all the villages in the whole municipality throw their garbage over there even though it is illegal. Other people burn their garbage over there and it is just up on the hill by our village so the smoke from it comes over our village and we want to solve that issue.

4. Sometimes we go there and try to stop people by parking our trucks on the road so they can't pass and throw their garbage away but the police then comes and tells us to move because they are allowed to throw their garbage out there.

4. The police say it is ok because the municipality does it too.

1. But under that garbage disposal site we have three natural water sources.

**And what water do you use?**

2. We use the water coming from the municipality but there are other villages that use the water coming from those sources. And I can't understand why they do not act on it or if they are not getting sick.

**Do you have any problems with pollution here in you village?**

1. Yes we have problems of course not everything is perfect, but we have a clean village.

**Are there any more problems beside these issues?**

2. These are the main problems, we have the forest around us and the village is clean but the garbage is the main problem.

**So what do you do with your garbage?**

2. We throw the garbage up on the hill where all others throw their garbage

**You don't follow your own suggestions?**

4. No well we don't have any other place to throw our garbage away.

4. It is ok that there is a wild garbage disposal site but we wish it wasn't so close to our village or more we wish it would be a real garbage site that someone takes care of.

**Are you going to try to tackle this problem in any way?**

1. We are trying to talk to the municipality.

4. We tried and we started talking with the municipality in Banja Luka but it stopped there. We always get the same answer that the garbage disposal has to be somewhere.

**So how is the overall health in you village?**

3. There is always someone that is sick but we have no proof that it is from smoke or polluted water or anything like that.

4. The problem at the moment is when the smoke comes over it is disturbing and it can lead to people coughing but then the smoke is gone. So it is only temporary while people are burning the trash. So it does in fact affect the health we can't say that it does not affect us but we have no proof and it is just like in the big cities like in Senica where there are factories and so on. But it's like short term pollution only while the trash is burning and then we have clean air again when the smoke is gone.

**How often approximately do they burn garbage up there, how often does the smoke cover your village?**

4. It is usually on Thursday or Friday, about once a week and like I said in short term it is ok only once a week we have the smoke but for long term we don't know the effects.

This has been going on for five years or so, but we are aware of this problem at least.

**So the drinking water, are you getting that from the municipality?**

3. From time to time the when the water pressure is to low from the city we use the water from the water sources up in the hill

**The one by the garbage site?**

3. Well, yes.

We have a lot of water sources and we can use both the ones up in the hill but we have another source from the river Sana and it is much cleaner, there is no garbage close to it and it is clean.

4. The Italians actually named it Sana because it means clear I think.

**Have you tested any of the water sources for pollution?**

3. Yes, we have, from the Sana source. And the water that comes from the municipality is regularly tested for pollution.

1. I think it is tested two or three times a year.

**And do you get the results from the tests made on the municipality water?**

3. Yes, the results are usually posted on display boards or on the radio.

2. Sometimes they also clean the water and we can't use it for two days or so.

### **How do they clean it?**

2. They put chlorine in it. And when it rains the rainwater mixes with the regular water and then it is cleaned and they put chlorine in it and we can't drink it for two days and then it is ok. We don't know how to explain exactly but it is somehow like that.

1. But there is sometimes too much calcium in the water and that is not good for us and they do something about that and then let everyone know that the water is good for drinking again.

3. Of course calcium is good for us but too much of it can be harmful for the kidneys so we can't drink the water if the calcium is too high.

### **So what are the main benefits of the PERA project?**

3. We have better living conditions in the village with PERA

### **How?**

5. In this project we have had two projects; one was fixing part of the waterworks and this youth hall.

### **Yes but what are the benefits you draw from the PERA experience, what has changed for you besides the projects you did?**

1. PEP taught us how to organize us together; we are more like a unit now. PEP showed us that this can be done; we can work together and make our own decisions.

4. Now we know to contact and make claims to the municipality and we will continue working with PEP methods.

## **5.2.4 Interview in Smajlovici**

**Their project during the PERA project was to build a community center.**

**The focus group was structured as follows;**

1. A man in his forties, a teacher.
2. A man in his fifties, a construction worker.
3. A man in his forties, a construction worker.
4. A man in his sixties, unemployed.

### **Has the project PERA in any way changed the way you see your village or what needs to be done here?**

1. Of course it has, this is a very organized village and we have done other projects, the thing that has changed the most is that the women are more active, now they are included

and want to take more action. And the second thing is, is that this project has raised awareness in the municipality that the villages are making claims and that they have to respond to those claims. And the village is also more connected now to the municipality.

**What kind of projects have you done before?**

1. Fixed the local road, built the Community center, and fixed the water supply system by changing the water tank. We have done a part of a sewage system. We have also done charity work and fixed two private houses.

2. And we have collected our own money for other projects.

**Would you have done this construction project if PEP had not helped?**

3: Yes, but the money issue was hard so PEP came at the right time.

**Do you have plans for any other projects for the village?**

1. Yes, a few important projects

The community hall that we have done needs to be finished.

3. We need to buy office supplies and finish the windows.

1. We also want tools to measure the pollution in the water.

We want to put up a filter system for the sewage system because it runs straight down to the river.

2. Because the water comes from the houses and it isn't clean but it runs straight to the river and it needs to be cleaned before it reaches the river.

1. But it is an expensive project so it will take time to collect money for it.

**Had you made plans for that filter system before PEP?**

1. Yes, we had plans but we had no money because it is a very large project.

**Do you think that now is a better time for that project because of better communication with the municipality?**

2. Of course now is a better, people are now more aware of the environment and more willing to take part in projects like this and the communication is better with municipality.

1. The municipality encourages all the villages to send in project proposals every year now to have better chance of getting money from the budget. Also it is a better time now because the municipality has begun to work with an environmental protection agency and focusing mostly on sewage systems and garbage disposals. We are more in action now.

1. Also there is a law now that if someone throws trash somewhere he will get a fine or a ticket if he is caught.

### **In your opinion what are the main causes for pollution?**

1. The worst problem is the garbage disposals. One problem is that the locals and people from other villages throw their garbage by their village. So this is like a large garbage pile. Every village has a garbage pile but this one is the worst.

3. One guy even came all the way from Sarajevo here to throw his trash.

1. We have tried to influence the people to not throw garbage all over and we have made a hole to throw in the trash but people were still throwing it around the hole. Now we have a garbage pickup. We established connection with a company that picks up the garbage but during the winter time we also have the snow machine so the both pick up the garbage and clear the streets.

### **When did you solve this problem?**

1. Three years ago.

4. But the main problem is that the garbage disposal hole is right next to the sports playground and there are still many people that throw the trash around the hole and not in it. So the trash spreads onto to sports ground. But we are planning to build a better sports ground with asphalt and with fence so we will not have the problem with the trash on the field.

1. Last year we sent a proposal to the Ministry of Education to build a better sports ground, it is a big project and cost around 150 thousand KM but it did not go through because of political issues.

1. There is also a big health issue that we want to deal with in some way and that is the problem with stray dogs. The kids have to walk sometimes up to three kilometers to school and there are so many stray dogs and they have rabies and there is always a risk of the dogs biting the kids. Before people could kill those dogs but now there is a law that forbids people to shoot them.

### **What about other health issues?**

1. It's good even though they play at the sports ground next to the garbage... they don't touch it they know not to play in the garbage.

1. I work in the school and so I can see who is coming to school and who's is sick so I can see that there are not many health issues here.

### **How about your drinking water?**

1. We have good drinking water that is tested every year for pollution by them. We take a sample every year and have it tested. We made a commitment to protect the water source, we put a fence around the source to protect it from animals and have forbidden tree cutting as well around the source. Each village has an assignment to check how much water is available and how many people have access to that water and to be sure to have the water tested every year.

3. All households have to pay in a water fund once a year and with that money we maintain the quality of the water well and pipes. And once we were fixing the water pipes and changing them we fund other pipes that were maybe two or three hundred years old. So this water well has been in use for a long time now.

**What do you think are the main benefits of the PERA project?**

1. Like I said before, we have been able to count more on the women, women are now a part of decision making process and that makes a big difference, now they can share their opinion as well. And the organization of how to organize and make formal claims on the municipality

### **5.2.5 Interview in Otigosce**

**Their project in the PERA project was to fix the water tank in the village.**

**The focus group was structured as follows;**

1. A man in his thirties, farmer.
2. A woman in her forties, a housewife.
3. A woman in her fifties, a housewife.

**Has the PERA project in any way changed the way you see you village and what needs to be done?**

2. Huge difference

Now we are more familiar with how to work together and now we are much closer as a community, more aware of how to start a project, now we know how to do the projects. We are more aware of different projects.

**Are you more aware of new projects then?**

2. We are more connected, how to work together, more interested in working with both women and men. We had no idea how to get in touch or how to seek our rights and now we know and it makes everything easier.

Also everyone was suddenly interested in participating.

1. Suddenly also during this project everybody had the same interests and was willing and interested in working together.

**Had you tried to solve a problem in your village before?**

2. Yes, we had tried, but we did not know the formal way of project proposals so we had never done formal claims.

1. We had tried in smaller groups but with informal claims they are forgotten.

1. We have written small claims before as a smaller group and it is like it doesn't go through in the municipality.

**Would you have started this project without PEP?**

1. We had plans to start it without PEP but we did not finish it because of lack of money.
2. It would have taken a much longer time at least.

**What kind of other projects do you have in mind?**

1. Fixing garbage disposal, asphaltting a part of the road, small repairs of the village, repairs of the sewage system in the village and fixing the water tank

**What kind of sewage system do you have?**

3. Every house has a private sewage system or a tank, which is then drained and waste is used as a fertilizer.

**In your opinion what are the main causes for pollution?**

2. Garbage, we have no control of garbage disposal.
1. But we are lucky that we have healthy nature around us, we don't have any factories close by so the air is clean and the nature is clean as well as the water
3. Mostly we are the once that make pollution, because of garbage burning
3. In the city they have this problem that people are throwing garbage all over and burning garbage all over. Also they have factories that pollute the air, so it is much worse there than here.

**Do you have a problem with the garbage and the burning of garbage?**

2. Yes we don't know what else to do with it. We have plans to get the garbage pickup from the municipality.
1. The municipality is working on getting garbage pickup to their village. But every household burns a part of the garbage but the municipality has given them a warning for burning the trash.
3. In the beginning of the village we have a hole that the trash is thrown in and there it is burned as well and the municipality has given us a warning about that.
2. We did not get a fine yet but just a warning that we have to solve this garbage burning issue.

**So have you started any discussions about how to solve the problem of burning trash?**

1. Yes, we are starting those discussions with the municipality. We have had some meetings but we haven't really started any discussions about how to solve this problem.

**So how is your water? Do you have your own drinking well for water?**

1. Ah it's the best you have to try it. (I tried a glass of water to try and it was very good)
2. Yes, it is the best in the country, it is clean, comes from the woods in the mountains. The entire village drinks this water.

**Have you tested your water for pollution?**

1. Yes, four years ago we tested it, but during last meeting a woman proposed to have it tested again.
2. Three or four years ago we had it tested.
1. We don't know if it needs to be tested because we think it's clean. But we will probably send a sample to be tested. There are many places that the water is polluted but we don't have that problem, our water is clean.
2. This guy that took the sample three years ago asked if he should take a sample again. Now the guy asked as well if we want him to check the quality of the water not only if it is polluted or not.
3. But no one touches this nature around the water spring so it is clean. It is probably better to test it every four or five years.
1. If you want I can keep on talking about our good water and make a proper presentation about it.

**So how is the overall health in the village?**

3. It is quite good; sometimes we get viruses that spread in the fall and the usual cold, but overall: good.
2. Children are healthy, they only get a virus or flu from other kids at school and that is only because it is going around like in the fall.

**How about the burning of the trash, you don't have any lung problems?**

2. No, the main burning of the trash is a bit far from the village so the smoke does not reach the village.
1. Some people burn the trash outside the house but that is a very small pile.

**Are you going to keep on using the benefits that the project PERA gave you?**

2. Absolutely we are going to use these methods.
1. Yes when you learn something new that works you have to keep on using that method.

### **5.2.6 Interview in Dragasevac**

**Their project in the PERA project was to buy trash cans and to build bus stops.**

**The focus group was structured as follows;**

1. A man in his thirties – a university student
2. A woman in her thirties – housewife
3. A man in his seventies – farmer

**Has the PERA project in any way changed the way you see your village or what needs to be done here?**

1. First of all it so good that PEP came here both to help us get together and financially, and also PEP helped us to make project proposals, we had so much help with the project cycle management the SWOT analyses and the formalities it was what we needed. We did not know how to do it before

Once we did the SWOT analyses and while doing that we found out that we have many problems, and once we realized what our main problems were it was easier to list them up, prioritize and solve them in a strategic way.

**Had you made attempts to start projects before PEP?**

1. Yes, we had before because we had a good connection to the municipality.

3. But we had problems doing something about the environmental problems. Because there is a wild garbage disposal right above our village, Vlasenica is the only river that goes through their village and we wanted to protect the river and the only way to protect it was to get the help from PEP and the project we did through PEP, getting garbage containers and trash cans was the only way to solve our problem. The municipality did not want to help us financially on that project and so we needed outside help and PEP was that for us.

And also that way we could protect our river.

**So have you started planning other projects?**

1. Yes, we are building a community hall. We are the only village in the municipality that does not have a community hall.

1. And also we are continuing with projects connected to the one we did with PEP, we now need regular garbage pickups from the municipality and we have to sign some agreements with them and so on.

3. The problem is that the whole village is not together on this, some do not want to pay extra for garbage pickups. Many people don't have money. But the worst is that some of the people who don't want to pay they still throw garbage all over.

1. But we are signing an agreement with the municipality on garbage pickups and a law will be passed that every village in the municipality has to have trash-cans so we have already done the groundwork and are continuing with the work we started with PEP.

When we talk about our wild garbage disposal that is here on the hill over our village, there is a law that will soon be passed in whole Bosnia and Herzegovina that says that every village has to have its own legal garbage disposal site, and we think that with that law the problem with the people throwing garbage all over the place will cease.

**Do you have any other environmental problems?**

1. The worst pollution is the cities' wild garbage site. Because it is between the city and the village, very close to the village. And it goes up to the mountains and is very close to the river and when it rains the trash again goes down to the river that we have already cleaned. And this cannot be solved until the law will be passed. We of course try with the trash cans and so on but all the others have to do something as well. Another solution to the problem that is possible is to build pipes for the river to go through so that trash and other polluted items cannot go in the river.

But this solution is of course very expensive.

**Where is your drinking water from?**

1. It is actually from the same river we were talking about but not from where the garbage is but up in the main source and there we have pipes and that is actually the city water and the whole municipality is getting water from there. It is also tested for pollution.

**So the water is tested, do you get reports about the testing?**

1. Yes, we get information about the quality and if we need any additional information we can just call, it is very transparent.

**Had you ever tried to solve the garbage problem before PEP came in?**

1. Yes, we had talked about trying to solve it but we knew we did not have the money.

**And how is the overall health here in the village?**

2. It is very good, but still the garbage disposal up by the river causes threats and also we have many stray dogs and that is of course a threat to our health. We also have a problem with birds, there are special kinds of birds that are mostly around the garbage site and from there come and eat our fruit during fruit season and with that, diseases and bacteria spread.

**In your opinion what are the main causes in general for pollution?**

1. Here we are overall ok. We are high in the mountains. But in the whole country is the underground water and of course there is the import, there is not enough control over what chemicals are imported and in many places people are using pesticides and it is even sold illegal chemicals in stores.

**So what would you consider the main benefits of the PERA project are?**

1. We have a good experience of how to do a good project proposal and now we are a bit more organized and the people are more aware of what we are doing and of the environment.

### **And so you will continue using the PEP method?**

1. Yes, of course. There have been other organizations coming here trying to make changes but PEP is the only one that had methods that worked and we could use.

### **5.2.7 Interview in Piskavice<sup>4</sup>**

**Their project in the PERA project was a construction of first phase of LC centre building in the village.**

**The focus group was structured as follows;**

1. A woman in her fifties – a store owner
2. A man in his fifties – a businessman
3. A woman in her thirties – a housewife

**Has the PEP project in any way changed the way you see your village or what needs to be done here?**

1. It has been an awakening of communication. The citizens or the villager have woken up. People did not want to communicate with each other; the project forced us to communicate.

2. After PERA we have started right away to have meetings about next project and we are working on garbage pickups now.

2. Even though this project is going hard like the project with PERA, because we have refugees returning, both Bosnians and Serbs, a mixed village. During this project with PEP we had support communicating with each other. All though there is a part not participating, not all villagers want to participate but still we are going forward with new projects. We have to keep on working on communications with the whole village.

**So before PERA you had not started any gatherings or projects?**

1. No never, before PERA we had never communicated with each other, only after PERA did we started to work on projects.

2. Until now we had to work with our group, the Bosnians working together and the Serbs we had never worked together as a village or a community.

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<sup>4</sup> Piskavice was in the Bosnian war turned into so called death camps with unthinkable cruelty and straight up executions of citizens (Cohen, 1994), since then the village has been divided into three parts with, Bosnian Muslims, Serbs and Croats. There has been no communication or solidarity between those groups since the war.

**You say your next project is garbage collection, how would you describe the situation now concerning the garbage?**

3. We don't have our own trash cans and we don't have any containers and the main problem now is that people don't want to have to pay for their own containers. But we have made an agreement with garbage pickup company to pick up trash two times a month but then again every household has to pay every month as well.

**Why this project?**

2. Because all the way from the municipality to the village you can see the garbage by the road and it was necessary to do something about it.

**What do you consider to be the main causes of pollution?**

1. First of all the people cause the most pollution, and then of course factories cause pollution as well. So because we don't have any factories we are fine but then we have the people throwing away garbage all over the place.

**Why is garbage causing pollution?**

1. The smell of the garbage and then the children always walk past the garbage and stop by it and they can get sick or get different diseases.

**Do you burn the trash?**

3. Yes, and that is the worst problem because we have so much plastic and chemicals in the trash that is burned. We have now cleaned the river but it was getting really polluted from trash.

**How is your drinking water or where do you get that from?**

2. We get it from the city or the municipality system. We are trying to connect all the villages in the municipality.

**Is the water tested for pollution?**

2. Yes, it is tested regularly. Two times a year or even more often, it is tested for everything.

**And you get the reports about the water**

2. Yes, we get reports and even through the radio. Especially if it's not good then they inform everybody about it so we don't drink the water.

**You mentioned that the kids are getting sick because of the garbage, how would you say the overall health is in the village?**

1. Well it is ok; besides usual cold or flu the health is good.

**Do you think that in any way environmental awareness has increased after PEP came in?**

1. Yes, the younger population has started talking about it and being involved on the meetings the environmental awareness is increasing.

**To summaries what are the main benefits from the PERA project.**

2. First of all the meetings are the main benefits.

Also the methods on how to go from one step to the next, and the democratic way, and getting this working group together and teach us how to work together.

**And you are using those factors in your next project.**

2. Yes, we are using or trying to use these methods. The thing is that as soon as we say you have to pay for something villagers get angry and so on, don't want to pay so it is a process but we are trying.

### **5.2.8 Interview in Goletici**

**Their project in the PERA project was to repair a part of the road to the village.**

1. A man in his forties – a construction worker
2. A man in his forties – a worker
3. A man in his thirties – unemployed

Interviewee number 3 did not answer any questions during the interview although after the recorder was turned off he started talking, so it seems as he had an issue with the recorder rather than being passive.

**Has the PERA project in any way changed the way you see your village or what needs to be done in your village?**

1. It has had a positive influence, because before PERA we had had small projects but we were a small group trying to do something but after PEP came we are now bigger and more structured. And now we have also completed projects and know how to go through the process. Before we just wrote claims but did not go through the whole process and now we can finish the projects.

**So has that changed your way of thinking or given you other ideas about new projects?**

1. Yes, it has. After the PERA project we started working on a new project trying to solve a problem with a wild garbage disposal site. And we used the PERA methods to help us start that project.

We had a meeting last night and there were five women who attended the meeting. That is what PERA project taught us and like last night on the meeting the women are involved now. Now we are working on this garbage project and another project about a playground for the children and we have sent claims to the municipality and the PERA methods are really helping us.

**You did not try to tackle the problem about the garbage site before PEP came in?**

1. No, we did not.

**Do you have a list of projects that need to be tackled or have you made plans for more projects other than those two?**

1. Yes, we have, we now have a website and now we are transparent about future projects. First we had to finish fixing the road and then the MZ community hall and now we have the project about the garbage and the sport ground. Next we want to fix the tourist cabins in the mountains to attract more tourists and we also have to finish fixing the street lights because half the village does not have a street light. We also don't have good enough water tank and some houses are not connected to it.

**Do you test your drinking water for pollution?**

1. Yes, we did twenty days ago, we sent sample to Tuzla and we do that every two years.

**And do you get a report about the water quality?**

1. Yes, we get a report and the quality has been super, we have three water sources and they are all good.

**In your opinion what do you think are the main factors that cause pollution?**

2. Well the wild garbage disposal is causing the most pollution, but the people themselves are the main cause of pollution: People who don't care for the environment and throw away garbage in the street or burn it. So people with bad habits are causing pollution. But we don't have any factories so we don't have that type of pollution. But we have the garbage all over and it is bad to see it, it looks bad.

**So it is mostly the visible pollution you are talking about concerning the garbage?**

2. No, not only visible

**Do you have any diseases or health issues in you village?**

1. Yes, we have health issues that we did not have before like respiratory diseases and more cancer incidents.

2. We also think that when the UN was here they made holes for their garbage that they covered up before they went away and we think that the ground is more polluted now because of those holes all over.

1. But also we have stress related illnesses now because of changed times. And of course post war syndrome.

**And are you burning the garbage in your village.**

1. Some people burn paper and products, but everything else we drive to the municipality.

**Do you think that environmental awareness has increased now after PEP came here?**

1. Of course it has, because for example the meeting we had included women and with them the thoughts were wider, meaning when the women came we have more suggestions and then issues concerning the environment come up. Because the women mostly stay in the village taking care of the home and because of that they are more aware of what environmental problems there are in the village.

**Ok so to summaries, what are the main benefits you got from the PERA project?**

1. Well as I said in the beginning the PERA project has helped us organize claims better and taught us in the process, now we are much more structured and now women are more involved and with them we get a different perspective, which is very good. Now we will continue using PERA methods and continue organizing and making claims.

### **5.2.9 Interview in Modridski Lug**

**Their project in the PERA project was to asphalt a sports ground.**

**The focus group was structured as follows;**

1. A man in his fifties – a coffee house owner
2. A man in his fifties – a mechanic
3. A man in his seventies – a farmer, retired

**Has the PERA project in any way changed the way you see your village or what needs to be done here?**

2. Yes, when you see the reaction of the villagers here you can see that is has

1. Before we did the playground the kids were playing in the dirt or on the road.

And the contact with the municipality has changed

We have had meetings with the working group and we have contacted the municipality more and mostly communication is better

PERA project has in it on way vision and strategy, like everyone has to be together and work together and we have not had that before. We have not had that before where we all meet up and everyone participates in the meetings like project PERA is trying, in getting everyone involved and we have not had that before. The democratic way of things were everyone is included in the decision-making

**And with everyone involved now is there a difference in what project ideas come up?**

1. First of all within this community we have had our own plans and visions and we know what we want to do.

The working group has been in contact with the municipality about other projects.

**Had you started before PERA in making claims to the municipality?**

3. The thing is with the municipality, it is so small and they don't have any money so if we make claims they can't help us. And we know that now that they do not have any money.

So we send now claims straight to the federal ministry.

**And for the next project do you have any ideas about what you want to do next?**

1. Right now we are finishing the road and that's the first thing we are going to do, there are other areas in the village that need asphalt so we are going to fix that.

And we have an environmental project next because there are holes by the river where people throw their garbage and we need to clean those holes and fill them up.

3. We have a garbage pickup once a week but it's not even legally done because they don't dispose of the trash legally.

2. The thing is that sand is removed or collected from the river banks here by the river Bosna and when they take the sand big holes are left behind: people, instead of throwing garbage in the waste dumps, they throw it in the holes by the river. That is not only problem with people here in the village but people from the next village also throw their trash here in the river. We have had meetings about this issue and it should hopefully stop soon or in a year or so but we are not so optimistic, we are not strong enough as a community, because we are small village. We have had almost like a demonstration but we are not many enough.

**What do you consider the main causes of pollution to be?**

3. The water causes pollution and of course the air.

**How is the water pollution?**

3. This Bosna river were we take out the sand and people throw their trash, the water mixes with the dirt and the trash and people are drinking and using the water for both drinking and watering their plantation and for their livestock. So people are becoming sick from the water and then we eat the animals that have been drinking that water and so on.

**So have you tested the water for pollution?**

1. Yes, we do every year, from the two water wells we have and we test both of them once a year.

**Do you test the water people are drinking from the river?**

1. No, we don't test that water, there are only Romani people<sup>5</sup> drinking the water because they have no other option, and we don't need to test it because when the water level rises in the river it mixes with the trash and we know that there is pollution in the water.

**Do you get the results from the test you have on the water from the wells?**

1. Yes, we always get reports about the tests.
2. The main problem is that there are families that are not connected to the wells.

**So how is the overall health in your village?**

1. We don't really have any statistics to tell you but we have had a few kidney problems. This area is known to have kidney problems and they get it because who drink the water from the river. The water was always used before we got the wells. We used it even when we were little

My father actually died from the kidney disease and my granddad as well.

**I'm sorry about that, but I forgot to ask how the results from the water are now?**

1. They are good. And have been good for a many years.

But the once that are not connected to the well have to drink from the river. And some still get sick

**And why are some of the houses not yet connected to the water well?**

2. We have households that are a bit further away from the well, so it costs money to connect them. It's complicated and we need to connect the pipes and that cost money. And then there is the ignorance of the people that think that it is just fine to drink from the river even if they are connected to the wells. We even have hard time trying to explain to them that they should not drink from the river.

**Do you think that people are more environmentally aware now that you are meeting up more often for meetings and everyone is involved?**

3. Yes, I think that people are, through the meetings we hear something about the environment and people talk about it, but still people are not enough aware what pollution can do and I think it will take time for everyone to realize.

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<sup>5</sup> The Romani people are an ethnic group living mostly in Europe especially in the Slavic-speaking lands of central Europe and the Balkans, who trace their origins to the Indian Subcontinent. Romani are widely known in the English-speaking world as Gypsies (Britannica, 2012).

But there are people like me that moved away during the war and like me I lived in Switzerland and that's why I am more aware.

1. We have the Roman population and they are not aware of the environment, you can see it by just seeing their children playing around they throw away paper and trash on the street and so on.

**So to summarize what do you think the main benefits of the PERA project are?**

1. Well first of all we want to thank PEP for coming to our village and we still want to work with PEP. But we do think that we will continue to work with PEP methods, PERA helped us to work together and that is what we will continue doing.

### **5.2.10 Interview in Ravna**

**Their project in the PERA project was to change an old school building into a community center.**

**Focus group was structured as follows;**

1. A man in his thirties - unemployed.
2. A woman in her forties – a housewife.
3. A man in his sixties - a construction worker.
4. A woman in her fifties - a housewife.
5. A man in his forties - unemployed.

**Has the PERA project in any way changed the way you see your village or what needs to be done?**

2. Of course it has

**How?**

5. The village is more cohesive, the entire village has gotten together and is more organized and are more active.

3. People are more active in coming together now.

2. Yes, we are more willing to continue and do other projects

**With better communication, have you begun discussions about what would be the next project for you?**

2. We would reconstruct or finish the community center and the path to the community center. The community center is not yet useable or we can't have meeting there when it is raining because the water flows in and there are a few things that haven't been finished there.

5. There is also no toilet or and running water so we have to fix the plumbing in the community center, for running water and sewage.

**When that house is finished do you have any other plans?**

5. We had plans for making a pool for the children before but after thinking about that project we think it is better for us to make a filter system for the sewage system because the sewage runs straight to the river and the children play in that river during summer.

2. Oh but it is better for them because they grow faster. (Joke)

3. We have a private kind of sewage system that is a tank in the backyard, but the all the villagers have a problem with that because it fills up. And once it fills up it runs straight to the river where the children are swimming. So we want to connect all the houses to a filter system so the waste will not go to the river.

5. But it is really expensive.

**Had you ever tried to solve that problem before the PEP project or had you sent any claims to the municipality before?**

5. We had plans to solve the community center problem before PEP but because the building was a school before so the children had nowhere else to go.

2. The community center we are renovating now was the school building and we had plans to start changing it to a community center but we could not throw the kids out because we had no other building for the school.

1. We wanted to start this project much sooner but the municipality did not want to give us permits for a new building so we became stubborn and we told them that either we do this project or nothing at all. So the municipality gave us a new building for the school, so the kids have a better building now to study in and we could finally go on with our project, the community center.

3. We had other ideas about projects like the swimming pool for the kids but we did not try to solve that or did not go far into those discussions.

**In your opinion what are the main causes for pollution?**

2. An open sewage systems.

5. Garbage which is thrown everywhere despite the huge container by the river

2. People throw garbage over and beside the container.

**Are those factors a problem here in the village?**

2. Yes, yes, you can see the container but when you look beside it and behind it you can see that the garbage is all over and around and in the river. And people are swimming in the river.

5. It would be better to have more containers.

**Have you made any complaints to the people throwing garbage all over the village?**

3. We have tried to ask everybody to throw the garbage straight to the container and we even thought about getting a closed container so that everyone had to go and open the container to throw out the garbage.

**So have you made claims to get these containers?**

1. Yes, we have sent a claim to get more containers and we asked for closed containers so that people have to go up to them to open them and put the garbage in, then they won't try to throw in while driving past the containers. But it is still a problem because we have to pay for the containers and we don't have that kind of money. We can try to collect every month but no one has money available every month to give.

2. The municipality is not very inclined to help; there is no electricity in the village and for the new community center the municipality has not given the village an ownership of the center, we are afraid that once the building is finished municipality representatives will take the house for themselves as an MZ building<sup>6</sup> and then the village is again without a community center. But since they don't want to give us permits yet, we want to make claims on them to fix the electricity of the center and once that is finished then we are going to continue to try and get the permit. Then we at least save money on the electricity.

**And how would you say the overall health is in the village?**

2. Super! We eat healthy and have our own organic gardens so we can grow our own food. The children are healthy, made of steel. The children do not play near the garbage or sewage. Of course the children get the flu and cold that comes every fall like usual but otherwise are very healthy.

**So the children don't play in the back yard of their home where the sewage system flows over and into the river?**

3. Although every house has this private sewage system that causes certain problems, the tank for the sewage systems are further from every house, not just in the back yard. So the children never play around it.

**Do you have a running drinking water?**

3. Yes, we have good water.

5. Yes, we have a drinking well up in the mountain an old well. In the summer the pressure is a little bit lower than in the winter because everyone is watering their gardens but still the water is really good in the summer as well.

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<sup>6</sup> An MZ building is a center for representatives of the municipality that are supposed to be of an assistance to the people in the village

**Is the water ever tested for pollution?**

3. No, never.

3. There's nothing surrounding the water well so the water does not need to be tested. And the pipes were changed several years back so now the pipes are good and the water is clean.

**So who takes care of the well?**

3. The villagers.

5. The municipality changes the pipes five years ago but we are still the once that maintain the well and the pipes.

**And for the final question, what are the main benefits of the PERA project?**

5. The main benefit is that now we know how to do the proposals for other projects. Another positive thing is that we are closer now with the municipality, we know now who to talk to about every project, which person is for the water department and who takes care of electricity and so on. We have met the right people now.

3. We now know where to get the permits; we know which department is what and so on. And we are working together with neighboring villages as well.

**So from now on you will keep on sending claims and doing projects for the village?**

5. We should but now the winter is starting. But for the future we will keep on going and soon we will send in claim for the toilet in the community center and for the roof as well.

5. We are hoping for more contributions now because the elections are coming up.

## **5.3 Results: Analysis**

With repeated surveys for three year it is easy to see if there have been any changes during the PERA project. Although PEP does not have environmental issues as its main focus there seems to be a positive gradual change towards environmental awareness and actions in the villages.

### **5.3.1 The garbage**

Although only half of the respondents claim that there is pollution in the village the actions taken show increased concern about their local environment.

Teaming up for village meetings, discussing problems in the village seems to have triggered some concern about the environment. When looking over the tables where the answers are all combined an obvious gradual change is visible in the active villages concerning environmental matters and the differences between active, neighboring and external villages show that the positive results of the PERA project are evident.

More active villages are organizing cleaning of their village and testing of their drinking water and every year the percentage increases.

Interviews with focus groups provided a better understanding of the answers given in the questionnaires. For an example with a close look at the question what is the cause for pollution all ten focus groups said that garbage is the main pollution, whether they talk about throwing garbage by the side of the road or if they only the garbage being a pollution they all have similar answer about what causes pollution.

#### **Taken from an interview in Village Donja Britvica;**

3. That is, the garbage
2. There is also a factory close by that causes pollution and they also throw garbage by our village even.

#### **In village Donji Ribnik**

2. [Wild garbage sites] are the main problems, we have the forest around us and the village is clean but the garbage is the main problem.

#### **In Village Dragasevac**

- 1; The worst pollution is the cities' wild garbage site. Because it is between the city and the village, very close to the village. And it goes up to the mountains and is very close to the river and when it rains the trash again goes down to the river that we have already cleaned. And this cannot be solved until the law will be passed. We of course try with the trash cans and so on but all the others have to do something as well. Another solution to the

problem that is possible is to build pipes for the river to go through so that trash and other polluted items cannot go in the river.

#### **In Village Goletici**

2. Well the wild garbage disposal is causing the most pollution, but the people themselves are the main cause of pollution: people who don't care for the environment and throw away garbage in the street or burn it. So people with bad habits are causing pollution. But we don't have any factories so we don't have that type of pollution. But we have the garbage all over and it is bad to see it, it looks bad.

#### **In Village Gornji Crnac**

1. Well the garbage causes the most pollution, wild garbage disposal.
2. Each neighborhood has their own waste dump but many though burn their trash.

#### **In Village Modridski Lug**

1. The water causes pollution and of course the air.

#### **How is the water pollution?**

1. This Bosna river were we take out the sand and people throw their trash, the water mixes with the dirt and the trash and people are drinking and using the water for both drinking and watering their plantation and for their livestock. So people are becoming sick from the water and then we eat the animals that have been drinking that water and so on.

#### **In Village Otigosce**

2. Garbage, we have no control of garbage disposal.
1. But we are lucky that we have healthy nature around us, we don't have any factories close by so the air is clean and the nature is clean as well as the water
3. Mostly we are the ones that cause pollution, because of garbage burning
3. In the city they have this problem that people are throwing garbage all over and burning garbage all over. Also they have factories that pollute the air, so it is much worse there then here.

#### **In villages Piskavice**

2. First of all the people cause the most pollution, and then of course factories cause pollution as well. So because we don't have any factories we are fine but then we have the people throwing away garbage all over the place.

### **Why is garbage causing pollution?**

3. The smell of the garbage and then the children always walk past the garbage and stop by it and they can get sick or get different diseases.

#### **In village Ravna**

2. An open sewage system.

5. And garbage which is thrown everywhere despite the huge container by the river

2. People throw garbage over and even alongside the container.

#### **In Village Smajlovici**

1. The worst problem is the garbage disposals. One problem is that the locals and people from other villages throw their garbage by our village. So this is like a large garbage pile. Every village has a garbage pile but this one is the worst.

These answers are an example of the perspectives of the people in the villages concerning garbage which is the most common reason for pollution. Some mention that because there are no factories close by they are fine. By 2011 considerably fewer people think that their village has a problem with pollution. This may be due to the fact that more villages have introduced cleaning in their area. The four focus groups that consisted only of men in village Gornji Crnac, Smajlovici, Goletici, Modridski Lug and all claim that inclusion of women or the non-discrimination at the meetings now is the main benefit of the PERA project.

### **5.3.2 Inclusion of women and young people**

People's perspective seems to change while working with PEP. Environmental awareness and action seems to be increasing. The most common answer in the interviews when asked about environmental awareness is that after PEP came into the village, with its methods and rules about meetings, different opinions were expressed and different views of problems that existed in the village were pointed out by people that had never before had a say at any meeting. Without having had such mixed groups at meetings many of the environmental problems that were right in front of their noses would never have been noticed or dealt with. Without PEP some claim that they would never have known that they could actually deal with these problems in the first place.

#### **As answers given in the village Goletici when asked if environmental awareness had increased after the PERA project started;**

1. Of course it has, because for example the meeting we had included women and with them the thoughts were wider, meaning when the women came we have more suggestions and then issues concerning the environment come up.

Because the women mostly stay in the village taking care of the home and because of that they are more aware of what environmental problems there are in the village.

**And from the interview in village Gornji Crnac;**

1. Yes, People are not as keen on throwing away trash, and in general the awareness has changed
3. It's seems as if it is a trend now in talking about it at the meetings.
3. We've always had people that had the environment on their mind but they were never involved in the meetings. So now when everyone participates in the meetings these people that were always talking about the environment and no one wanted to listen, they are heard and people realize what they are talking about.

**As from the village Donja Britvica;**

1. Of course it has increased; we now want to do something about the garbage and trying our best to solve that problem. We did not even know before that we could actually do something about this garbage issues but now we know we can and that is the biggest change for us.

**And as well from the village Piskavice;**

1. Yes, the younger population has started talking about it and is involved in on the meetings the environmental awareness is increasing.

With women also involved in the meetings men get a different insight to the problems in the village. As they said in village Golitici more women tend to the home than men and because of that they are more aware of their near environment. Women notice the quality of the water they use every day for cleaning and are more aware of the smoke from burning trash that sets in the clothes hanging outside for drying. The women also tend more often to the health and sanitation of their children and notice if they have been playing close to open sewage systems or a garbage site. Since PEP began its PERA project everyone has the opportunity to express their opinion and views at local community meetings and that seems to have helped others in the villages to see and understand the environmental problems as well.

### **5.3.3 Future projects**

Although there is an increase in participants claiming there is no pollution in the village it seems to be at odds with actions in the villages. As shown on graphs regarding cleaning and testing more villages seem to be organizing cleaning or having their water tested for pollution. So whether people are in agreement or not about pollution problems, these issues become a priority for many villages, which again fortifies the answers given in the interviews about their next or priority projects.

In most cases people in the focus groups claim that future projects or projects already started are about environmental problems in the villages. Water tanks are being renewed, sewage systems are being fixed, filter systems for sewage that is polluting the rivers are being installed, garbage disposal sites are being cleaned and garbage pickups organized.

Below are some selected quotes.

#### **In village Donji Britvica**

1. Well we really need to fix the playground and also to start a project to fix the school because it is not so good, the water is a problem here
4. We have to push after the claims and keep on sending requests because the Ministry for Education is supposed to help us with this problem
1. But we have a problem with the garbage right in the beginning of our village, the thing is it easy to solve the problem in our village now because we have containers, but by the entrance of the village people from other villages and from the city throw away their garbage. We have to continue communicating with other villages so they will stop throwing the garbage where we have been cleaning it away.

#### **In village Donji Ribnik**

4. Yes, we need to do something about our water and we want to start working on our water supply system.
2. Because we have this wild garbage disposal site that is right above our main water source, the whole municipality all the villages throw their garbage over there even though it is illegal. Other people burn their garbage over there and it is just up on the hill by our village so the smoke from it comes over our village and we want to solve that issue.

#### **In village Dragasevac**

1. Yes, we are building a community hall. We are the only village in the municipality that does not have a community hall.
1. And also we are continuing with projects connected to the one we did with PEP, we now need regular garbage pickups from the municipality and we have to sign some agreement with them and so on.
3. The problem is that the whole village is not together on this, some do not want to pay extra for garbage pickups. Many people don't have money. But the worst is that some of the people who don't want to pay they still throw garbage all over.

#### **In village Goletici**

1. Yes we have, we now have a website and now we are transparent about future projects. First we had to finish fixing the road and then the MZ

community hall and now we have the project about the garbage and the sport ground. Next we want to fix a tourist cabins in the mountains to attract more tourists and we also have to finish fixing the street-lights because half the village does not have street lighting. We also don't have good enough water tank and some houses are not connected to it.

#### **In village Gornji Crnac**

3. The water supply system needs to be fixed, change the pipes and we need to cover the water well. That is the priority

#### **In village Modridski Lug**

1. Right now we are finishing the road and that's the first thing we are going to do, there are other areas in the village that need asphalt so we are going to fix that.

And we have an environmental project next because there are holes by the river where people throw their garbage and we need to clean those holes and fill them up.

#### **In village Otigosce**

1. Fixing garbage disposal, asphaltting a part of the road, small repairs of the village, repair sewage system in the village, fixing the water tank

#### **In village Piskavice**

2. After PERA we have started right away to have meetings about next project and we are working on garbage pickups now.

#### **In village Ravna**

5. We had plans for making pool for the children before but after thinking about that project we think it is better for us to make a filter system for the sewage system because the sewage runs straight to the river and the children play in that river during summer.

#### **In village Smajlovici**

1. Yes, a few important projects. The community hall that we have done needs to be finished.

3. We need to buy office supplies and finish the windows.

1. We also want tools to measure the pollution in the water. We want to put up a filter system for the sewage system because it runs straight down to the river.

2. Because the water comes from the houses and it isn't clean but it runs straight to the river and it needs to be cleaned before it reaches the river.

1. But it is an expensive project so it will take time to collect money for it.

The interviews show that people tend to compare their village to the cities where population is much higher, garbage and air pollution much worse because of factories and traffic, and therefore people see their village as clean. As they said in the village Otigosce; “In the city they have this problem that people are throwing garbage all over and burning garbage all over. Also they have factories that pollute the air, so it is much worse there than here”. As for the village Donji Ribnik; “[By burning trash] it is just like in the big cities like in Zenica where there are factories and so on. But it’s like short term pollution only while the trash is burning and then we have clean air again when the smoke is gone”. However people in the villages see the household garbage as pollution problem that they need to take care of.

More and more villages are organizing village cleaning and from the interviews it is clear that actions of environmental concern are a priority. People in the villages have become aware that they can do any project they set their mind to, although there can be a problem with funding they realize that they can send a request for support further or higher up then to their municipality. People claim they had no idea that they had a say in the matter whether people throw garbage on the side of the road or not. Since the PERA project started people are aware of what their rights are and with everyone in the village involved a wider perspective on problems concerning their village has positive results regarding the environment.



## 6 Discussions

The results show a clear increase in pro-environmental actions in the PERA villages. As the tables with combined results from the graphs clearly show, more and more villagers have started regular cleaning of the villages and there has been a rapid increase in how often their drinking water is tested for pollution. When asked whether they think their village has a problem with pollution, half the participants claim there are no problems. What can actually be the case is that people tend to compare themselves to another situation or cities that they know is worse off. The pollution in the cities is much worse than in small villages up in the mountains, since the cities are overcrowded, with factories and heavy traffic. To compare a small village and the pollution problems to the latter, gives one conclusion; your village is clean or at least much cleaner. The interviews also confirmed that people are in fact making this comparison.

However, the answers to these particular questions can also be misleading since the villagers might not have trusted the PEP International staff to begin with. Nonetheless, people claim that there are pollution problems hoping some organization will do something for them, but as time goes by and PEP staff keeps coming back they start trusting them and answering honestly. The PEP staff often reported a feeling of distrust during the first stages of the PERA project, however that feeling faded away as the project continued. Whether people claim their village has problems with pollution or not the questionnaires clearly show people are taking action to tackle environmental problems. People see the garbage as an environmental problem in their village that needs solving. People also claim that they had no idea that they could actually deal with environmental issues as garbage sites, open sewage systems, and polluted drinking water.

People claim they have learned good work ethics from the PERA project, as open non-discriminated meetings, project identification and have gained the capacity and strength to solve identified problems whatever they are. The interviews also clearly show that the involvement of women and young people has increased environmental awareness and priority projects have now become of environmental nature concerning the health and welfare of the communities.

PEP International has given the communities a framework to follow, guidelines and methods to use as they go along. Through the long-term PERA project people have adapted to those methods and guidelines and claim they are going to use them for solving future projects.

The chi-square test shows that there is a significant statistical difference between the villages in 2010 and again in 2011. There can be other factors nationwide that lead to a change in people's behavior or actions as an example a new legislature or more media coverage on environmental issues but that would be the same in all villages, active, neighboring and external and therefore no significant difference or any statistical difference in actions between those villages. Since the chi-square test measures the difference between all the villages every year, all nationwide factors or other factors found

in most of the villages even each other out and that leaves the PERA project in the active villages different from the others.

## **6.1 Other NGO's with similar objective.**

Of course other organizations with similar objectives as PEP International are working in Bosnia and Herzegovina. Their objectives are rather general and include number of issues that are compatible with the objectives of PERA.

However, an interesting observation during the implementation of PERA was that although these organizations had been actively working in some of the municipalities engaged in PERA, and with similar objectives, none of the municipal officials made any references to their experience working with them.

The following is a simple overview of the organizations and discussions around them.

### **6.1.1 UNDP (United Nations Development Program)**

UNDP LOD (Local democracy) aims to “encourage NGOs/CSOs to specialize/professionalize their activities – to adopt a long term planning perspective, to become more responsive to local needs and less dependent on current donor priorities.” As well as to “contribute to the democratic stabilization, conciliation, and further development of Bosnia and Herzegovina through support to select municipalities in establishing improved local authority/civil society relations and facilitating financing mechanisms for improved service delivery” (UNDP, 2009).

UNDP targets ten municipalities and the project focuses on institutionalizing the principles of the relationship between local authorities and civil society organizations and raising awareness regarding the significance of such principles, strengthening the capacity of different stakeholders to better engage in this relationship, as well as establishing a transparent and consistent municipal funding mechanism to support implementation of priority projects and ensure delivery activities by civil society organizations (UNDP, 2009).

The main problem with this approach is that the civil society organizations are still to be identified as such. The problem encountered by PEP International when working with 20 municipalities is that little is known about these organizations and whose interests they represent. In the working groups within the PERA project some people claim that these organizations are run by municipal associates and represent the municipality while others claim that they were organized by the villagers themselves with the communities' interests in mind. People have little or no trust towards these organizations and are reluctant to go through them with their claims (PEP International, 2010).

The main differences between is that PEP uses bottom up approach whereas UNDP targets the middle ground. PEP has learned through the municipal associations that the middle level of MZ<sup>7</sup> (Mjesna Zajednica) is now being reconsidered and even downgraded as

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<sup>7</sup> Mjesna Zajednica is a Neighborhood Community Organization. A leftover from the former Communist system of Yugoslavia and is highly disputed as relevant today.

unimportant and will be left for individual municipalities to define (PEP International, 2012).

### **6.1.2 OSCE (Organization for Security and Co-operation in Europe)**

Their project goal is to “assist municipalities to establish mechanism to actively engage with local communities”, in order to improve the municipal regulatory framework and the basic set-up conditional for MZs or the civil society organizations (OSCE, 2012). They also relate to the development of clear and transparent criteria and procedures governing municipal funding for MZ projects. Their focus is set on improving the municipal management of MZ affairs through the establishment of appropriate mechanisms, structures and position within the municipal administration. They claim this would help to establish communication channels and consultation practices between the municipalities and MZs.

“OSCE Mission advocates greater co-operation between MZs and municipalities so that issues of community concern are properly resolved through targeted projects. Improved regulatory framework, increased capacity, and strengthened network of local community leaders are the key to finding effective solutions to community problems through joint action” (OSCE, 2012).

OSCE targets the same middle ground as UNDP and will therefore encounter similar problems as identified above.

### **6.1.3 Olof Palme International center**

The Olof Palme International Center (OPIC) calls their approach Popular Participation, and claims it is the foundation of a functioning democracy. OPIC claims that people must be given the opportunity to organize themselves in order to formally participate in community development. Social movements seeking to change the society must base their efforts on the knowledge and experience of active people. Creative and independent citizens who think critically bring strength to democratic organizations such as the OPIC

OPIC therefore supports;

- The development of strong and independent social movements and civil societies around the world
- strengthened collaboration between social movements and civil society on the one hand and the established political powers of the other
- the commitment and organization specifically of women, the young and the vulnerable (such as migrant workers and people in the informal sector) (Olof Palme International Center, 2011)

OPIC aims to strengthen the Civil Society Organizations or MZs as UNDP and OSCE are doing without having identified these MZs and whose interest they represent. OPIC is regionally oriented unlike PEP International, which is organized on a national basis.

## 6.2 Main results linked to the literature review

Environmental concern and environmental awareness are two very different things. Caring for the environment; feeling bad when watching news about environmental disasters such as oil spills and seeing birds all covered in oil is not the same as realizing how one pollutes the air by burning the household trash or polluting the ground water by throwing the garbage at a dump-site that has been there for years. Knowing the main causes for pollution is in fact not the same as caring for the environment either. One could actually know that throwing trash at the side of the road causes pollution without really caring about it. These are issues that may be difficult to tackle; raising awareness of how pollution may threaten people's quality of life might be the best way to go at it. It does not stop there as Lorenzoni et al (2007) concluded, environmental awareness is on its own not enough to take care of environmental problems; the capacity to deal with those problems is what is really needed. Without the capacity to tackle the environmental problems nothing really changes, but environmental awareness is needed to realize that these are problems that need to be solved. As stated in the interviews people are more aware of environmental issues now since the village meetings became open to all villagers and have opened the discussions about these issues. People are also learning about problem identification and solving particular problems. What this study shows is that people are more aware of the environmental problems in active villages and they now realize how to solve those issues and have the capacity to do so.

The most important way to facilitate change is capacity building, the strengthening of local communities to identify problems and prioritize them, to make a project plan with financing and finance control and to monitor and evaluate actions. As stated in the interviews these are methods of great value and people claim they are going to continue using those methods PEP International taught them.

Environmental awareness in the active villages in the PERA project is increasing and what PEP International is working on is strengthening the capacity of the people in tackling the problems they identify. What happens here is that people start sharing their concerns for the problems in their village and now the villagers have the capacity to solve the problem identified. So with enhanced environmental awareness they have the tools and capacity needed to act on that awareness.

As Fraser et al. (2006) concluded in their research a bottom up approach is more likely to lead to sustainable development (Fraser, et al., 2006). The PERA project focuses on the grass-root in their bottom up approach assisting the local communities in the decision-making process, unlike UNDP, OSCE and the Olof Palme International Center that focus on the middle ground, an entity between the grass-root and the local governments or municipalities. Although many organizations state they are working in public participation or community building not all are actually working at the grass-root level. PEP International focuses on the grass-root level, making the local people the key actors in the PERA project. That is a clear bottom-up approach and according to the interviews people are continuing with the methods they have learned during the PERA project and have already started new projects on their own using these methods and claim they are going to use them for future projects as well. This is a clear sign of sustainable development.

PEP International focuses on equality of both gender and age. There are rules to follow when meetings are held and if equal division of age and gender is not at hand when

meetings are held the meeting is canceled and rescheduled, these rules resulted in up to 30% of the village population attending the meetings. As discussed in chapter 2 many studies have shown young people and women are more aware or concerned for environmental problems than others, because of education nowadays and media and as the interviewees in Goletici claim the environmental awareness has increased since the women now attend the meetings and are more aware of the near environment because they tend more often to the home and stay more in the village than the men. As in the village Piskavice, interviewees state that young people are more aware of the environmental problems in the village and therefore since they now attend the meetings people are becoming more aware of the environmental problems the young people are pointing out. Due to the strict policy that PEP International has regarding non-discrimination at meetings women and young people can now attend and are allowed to express their opinion and concerns and this is clearly one of the reasons environmental issues are being implemented into the list of priorities.

PEP International aims to encourage citizens to participate in open meetings, they encourage everyone to speak their mind, and they have rules about non-discrimination so everyone has the right to be heard. PEP International main goal is to strengthen the community in the decision-making process and teach them the formalities of communication, identification of problems with SWOT analysis, financial process and the evaluation of the process. PEP does not teach or educate the communities about environmental problems, that is what the community chooses to discuss themselves. What PEP does instead is they set up the platform so that everyone can share their concerns, whatever the concerns are about. As Spence and Pidgeon (2009) said; it is not enough merely making people more aware for action to take place. PEP strives to teach the communities to solve the problems identified, so whatever the problem is, they now have the knowledge and the capacity to solve it.

Pidgeon (2010) noted that there is one way to gain the commitment and trust of the public and change their habitual behavior and that is to foster grass-root demands and therefore gain the support and trust of the public. With a long term project like the PERA project PEP International is gaining the public's commitment and trust and therefore a sustainable behavioral change. People work differently now than they used to, they work together on identifying common problems, find solutions and solve the problems identified.

Lorenzoni et al. (2007), Steg and Vlek (2009) stated that changing one's behavior is a long term difficult process. It is not an easy fix to tell people to act differently than they have their whole life. There are no quick solutions to that change. What often seems to happen is that government and organizations do not have the patience to wait for the change to happen, try to make a change in a year or even half a year with quick and cheap projects leading to only short-lived effects (Lorenzoni, et al., 2007; Steg & Vlek, 2009). All over the world people have some kind of habits, in Bosnia and Herzegovina people are not used to work together in the villages, at least the men are not used to working with the women and young people in identifying problems and needs and prioritizing projects for the villages. People are also used to the projects done being big and visual. Humanitarian agencies have been working in Bosnia and Herzegovina since the Bosnian war, providing people with basic necessities, repairing houses that were destroyed or damaged during the war and repairing infrastructure to ease public transport to mention a few projects. What humanitarian agencies tend to do is provide people with what they need or fix something for the people in need, but what that tends to do is leave people waiting for someone to

come and continue to provide and repair for them. Another problem with the assistance of the humanitarian agencies is that often a big visual change was made, like building of houses or asphaltting the roads. With that in mind people tend to start thinking about projects that are big and visible. People are also used to big and visual projects appearing on the news and media, whereas small projects are not reported in the media. This is one aspect that needs changing, people have gotten used to doing big projects and therefore do not think about the smaller projects until after the big ones have been finished.

In one village active in the PERA project; their chosen project was to make a 370 meter section of the road wider. What is interesting about that project is that the road was already remarkably well maintained, compared to most mountain roads in Bosnia and Herzegovina, but the most interesting thing is that the school building in the village had no running water or central heating so kids had to run out to the forest or home to use the bathroom. This is a clear example of how the people tend to choose something big and visual for a project. What is happening now in this village is that their next priority project is getting running water into the school and fixing the central heating for the school building.

Although people are happy about the projects they chose to do during the PERA project they have now started prioritizing their needs, after choosing project that are big and visual and especially when they have used the money contributions from outside donors, people start to think about smaller projects. People start prioritizing in a different way knowing they now have done the big and visual part and now have to gather money themselves and are unlikely to get further donations from other agencies. The focus has shifted and people now think about smaller projects yet priority projects like their health and welfare and basic needs.

The biggest barrier for behavioral change seems to be the issue of trust. Distrust is widespread in Bosnia and Herzegovina, people are dealing with distrust toward each other in the villages as well as outside actors. Therefore as Lorenzoni et al. (2007) concluded, communications need to be sustained on regular basis, creating awareness and acceptance of the outside actor, and with a long-term framework of involving the public in the decision-making process.

At a PERA project conference during the closure of the project in Bosnia and Herzegovina the participants stated that through continuous cooperation, better communication is established and greater trust achieved between the people and their local government. PEP International claims this is what the intentions are by long-term projects, gaining the trust of the local communities, assisting them in overcoming their distrust towards each other and to build a strong efficient community able to take action in solving a common problem. A clear result of this long-term project is the village Piskavice. They state that before the PERA project there were no communication between the ethnic groups in the village but PEP forced them to communicate. The persistence and long-term presence of PEP in the village encouraged these changes.

Steg and Vlek (2009) discuss how regular systematic evaluations can reveal the success of a project. They also point out that ongoing evaluations and measurements can also strengthen the public's commitment to change their behavior. PEP International has performed its baseline study and the follow up studies and plans to continue their measurements of the PERA project in Bosnia and Herzegovina. With this evaluation and

measurement as Spence and Pigeon discuss a continuing positive change can be reached and successful sustainable development achieved. When looking at the graphs and tables from the analysis of the questionnaires, one can clearly see that through the years there is a gradual increase in action in the active villages in the PERA project. What it shows as well is that during the last year of the survey both neighboring and external villages have also increased action concerning cleaning of villages and testing the water for pollution.

### **6.3 Weaknesses of the research**

As active villages show clearly the effect of the PERA project, responses from neighboring villages show a different trend as well as the external villages when compared to active villages. Fewer villages organize cleaning or testing for pollution in the water during the second year of the project but during the third and last year of the PERA project something changed, neighboring and external villages showed increased environmental actions. What can be a contributing factor in this change is that a local television station in Bosnia and Herzegovina broadcasted a TV show about the PERA project. Not having organized interviews with residents of the neighboring or the external villages is a clear weakness in this research. Without those interviews an apparent reason for that change is unknown and therefore a possible subject for continuing research.

Another weakness is the missing statistical measurement of the difference in action between years in the same village and is a possible subject for further studies.

The questionnaire has limited questions about environmental issues and might that be considered a weakness of this research although the questions used show a clear change in action. For future references additional questions concerning environmental issues could prove helpful in assessing impact of this particular subject.

### **6.4 A guide for PEP International**

As this study shows, the PERA project is already leading to increased environmental awareness and action and therefore there is no need to suggest any radical changes to the foundation of the project. However for PEP International to become more environmentally oriented there might be a few points to consider.

#### **6.4.1 A closer look at the local environment**

- What might be interesting when setting up village meetings and encouraging people to identify problems in their near surrounding is to get them to analyze how that problem influences their daily life and how actions concerning that problem may in fact enhance the quality of life for people in the village. To encourage them to identify the qualities of solving a certain problem a deeper understanding of peoples' perspective might be gained right away at the beginning of the PERA project. This might also encourage people to take a closer look at the problem identified and the solution at hand and if the problems really are a priority or not.

### **6.4.2 Think smaller**

- PEP International controls a grant of € 5.000 for every active village in the PERA project. What could be interesting as well is if PEP would encourage people to think small and divide the grant into smaller sums. Instead of the entire grant to be handed out at the end of the project, encourage the villages to do several smaller projects in their local environment. This way there is a possibility that people might stop choosing the big and visual projects like asphaltting of sport playgrounds and go straight for the smaller problems in their near environment.

### **6.4.3 Research suggestions**

- If PEP International intends to be more environmentally oriented in the future they might consider making few adjustments to their questionnaire, with more environmentally oriented questions concerning identification of environmental problems, solutions regarding those problems, and questions regarding causes for pollution and if these problems can be found in the village. With these changes they might find it easier to measure project performance regarding those issues.
- What is missing in the developing world are research oriented agencies and measurements of their progress, influence and sustainability. PEP International is a research oriented development agency and what the present study has shown are the effects of the PERA project. It is important to continue research in Bosnia and Herzegovina on continued influences of the PERA project and measurement of sustainability.
- Involving universities in the research part of PEP International may lead to further engagement of citizens in the project and enhanced prospect of sustainable development. The literature shows that continuous research and presence of staff in the villages active in the project encourages further behavioral change and continuity of citizens' engagement. As an example an advertisement of research opportunities on the PERA project for students could have positive effects on the outcome of the project.

### **6.4.4 Long-term engagement**

- Although the PERA project is a long-term project there is still evidence that it could have benefitted from an even longer engagement. PEP staff reports that distrust was a difficult barrier to overcome and only at the end of the project a sign of trust was in sight. To change people's behavior is a long-term project and to gain the trust of citizens is evidently very time-consuming. Therefore an added time could lead to an even better outcome as well as better possibility of sustainable development.

## **7 Conclusions**

The results illustrate that there is a clear increase in pro-environmental actions in the villages' active in the PERA project, people are increasingly organizing the cleaning of their village local environment and are increasingly testing their drinking water for pollution. In-depth interviews show that people see garbage as the main pollution factor in their village and therefore are taking actions to tackle that problem.

The interviews show that people are becoming more aware of environmental problems as well. PEP International applied the PERA project with strict rules and methods concerning public participation and engagement of the whole village in problem identification, because of those rules people who have not attended any village meetings before have the chance to express their opinions and concerns and that seems to be enhancing environmental awareness of others. Interviews also show that future projects and priority projects are of environmental concern.

Therefore, the conclusion of this research is that the PERA project applied by PEP International does enhance environmental awareness and action and one of the important factors to that change seems to be the inclusion of women and young adults at the village meetings.



# References

- ATSDR. (2011). Substance Index for ToxFAQs Retrieved 20.4, 2012, from <http://www.atsdr.cdc.gov/toxfaqs/index.asp>
- Ayomoh, M. K. O., Oke, S. A., Adedeji, W. O., & Charles-Owaba, O. E. (2008). An approach to tackling the environmental and health impacts of municipal solid waste disposal in developing countries. *Journal of Environmental Management*, 88(1), 108-114.
- Berenguer, Jaime, Corraliza, José A., & Martin, Rocio. (2005). Rural-Urban Differences in Environmental Concern, Attitudes and Actions. *European Journal of Psychological Assessment*, 21(2), 128-138.
- Bickerstaff, K., Simmons, P., & Pidgeon, N. (2007). Constructing responsibilities for risk : negotiating citizen-state relationships. *Environment and planning A*, 40(6), 1312-1330.
- Blocker, T. Jean, & Eckberg, Douglas Lee. (1989). Environmental Issues as Women's Issues: General Concerns and Local Hazards. *Social Science Quarterly*, 70(3), 586-586.
- Blowers, Andrew, & Glasbergen, Pieter. (1995). 7 The search for sustainable development. In Glasbergen Pieter & Blowers Andrew (Eds.), *Environmental Policy in an International Context* (Vol. Volume 1, pp. 163-183): Butterworth-Heinemann.
- Bodur, Muzaffer, & Sarigöllü, Emine. (2005). Environmental Sensitivity in a Developing Country. *Environment and Behavior*, 37(4), 487-510.
- Britannica, Encyclopedia. (2012). Rom Retrieved 23.07, 2012, from <http://www.britannica.com/EBchecked/topic/250432/Rom>
- Brohman, J. (1996). *Popular Development: Rethinking the Theory and Practice of Development*: Blackwell.
- Center for Balkan Development. (1996). History of the war in Bosnia Retrieved 10.4, 2012, from [http://www.balkandevlopment.org/edu\\_bos.html](http://www.balkandevlopment.org/edu_bos.html)
- Church, Cheyanne, & Rogers, Mark. (2006). *Designing for Results: Intergrating Monitoring and Evaluation in Conflict Transformation Activites*. Washington, DC: Search for Common Ground.

- Cohen, Roger. (1994). Bosnian Camp Survivors Describe Random Death Retrieved 16.3, 2012, from <http://www.nytimes.com/1994/08/02/world/bosnian-camp-survivors-describe-random-death.html?pagewanted=all>
- Condelli, Larry , & Wrigley, Heide Spruck. (2004). *Real World Research: Combining Qualitative and Quantitative Research for Adult ESL*. Paper presented at the International Conference for Adult Literacy and Numeracy, Loughborough, England.
- Davies, M.B. (2007). *Doing a Successful Research Project: Using Qualitative Or Quantitative Methods*: Palgrave MacMillan.
- Dunlap, Riley E. (1994). International Attitudes Towards Environment and Development. In Helge Ole Bergesen & Georg Parmann (Eds.), *Green Globe Yearbook of International Co-operation on Environment and Development 1994* (pp. 115-126). Oxford: Oxford University Press.
- Dunlap, Riley E., Gallup, George H., & Gallup, Alec M. (1993). Of Global Concern. *Environment: Science and Policy for Sustainable Development*, 35(9), 7-39.
- Dunlap, Riley E., & Saad, Lydia. (2001). Only one in Four Americans Are Anxious About the Environment: Most favorable approach the environmental protection. Retrieved from <http://www.gallup.com/poll/1801/only-one-four-americans-anxious-about-environment.aspx#1>
- Dunlap, Riley E., & Scarce, Rik. (1991). THE POLLS—POLL TRENDS. *Public Opinion Quarterly*, 55(4), 651-672.
- Food & Agriculture Organization. (2007). *Fire Management: Global Assessment 2006 : a Thematic Study Prepared in the Framework of the Global Forest Resources Assessment 2005*: Food and Agriculture Organization of the United Nations.
- Fowler, F.J. (2009). *Survey Research Methods*: Sage Publications.
- Fraser, Evan D. G., Dougill, Andrew J., Mabee, Warren E., Reed, Mark, & McAlpine, Patrick. (2006). Bottom up and top down: Analysis of participatory processes for sustainability indicator identification as a pathway to community empowerment and sustainable environmental management. *Journal of Environmental Management*, 78(2), 114-127.
- Glenn, Norval D. (1980). Values, Attitudes, and Beliefs. In Orville Gilbert Brim & Jerome Kagan (Eds.), *Constancy and Change in Human Development* (pp. 596-640): Harvard University Press.
- Gran, G. (1987). *An annotated guide to global development: capacity-building for effective social change*: Resources for Development and Democracy.
- Hamilton, Lawrence C. (1985). Who Cares about Water Pollution? Opinions in a Small-Town Crisis\*. *Sociological Inquiry*, 55(2), 170-181.

- Harrell, M.C., Bradley, M., Corporation, Rand, & Institute, National Defense Research. (2009). *Data Collection Methods: Semi-Structured Interviews and Focus Groups*: RAND.
- Hunter, Paul R., MacDonald, Alan M., & Carter, Richard C. (2010). Water Supply and Health. *PLoS Med*, 7(11).
- Iizuka, Michiko. (2000). Role of Environmental Awareness in Achieving Sustainable Development. Santiago: ECLAC.
- Inglehart, Ronaldo. (1990). *Culture Shift: in Advanced Industrial Society*. Princeton: Princeton University Press
- Kampa, Marilena, & Castanas, Elias. (2008). Human health effects of air pollution. *Environmental Pollution*, 151(2), 362-367. doi: 10.1016/j.envpol.2007.06.012
- Kleinbaum, D.G., Kupper, L.L., & Muller, K.E. (2007). *Applied Regression Analysis and Other Multivariable Methods*: Brooks/Cole.
- Kollmuss, Anja, & Agyeman, Julian. (2002). Mind the Gap: Why do people act environmentally and what are the barriers to pro-environmental behavior? *Environmental Education Research*, 8(3), 239-260.
- Lorenzoni, Irene, Nicholson-Cole, Sophie, & Whitmarsh, Lorraine. (2007). Barriers perceived to engaging with climate change among the UK public and their policy implications. *Global Environmental Change*, 17(3-4), 445-459.
- Lorenzoni, Irene, & Pidgeon, Nick. (2006). Public Views on Climate Change: European and USA Perspectives. *Climatic Change*, 77(1), 73-95.
- Mack, N., & Woodson, C. (2005). *Qualitative Research Methods: A Data Collector's Field Guide*: Family Health International.
- Estados Unidos Agency for International Development.
- Martínez, Jesús, Vega-García, Cristina, & Chuvieco, Emilio. (2009). Human-caused wildfire risk rating for prevention planning in Spain. *Journal of Environmental Management*, 90(2), 1241-1252.
- Nnorom, I. C., & Osibanjo, O. (2008). Overview of electronic waste (e-waste) management practices and legislations, and their poor applications in the developing countries. *Resources, Conservation and Recycling*, 52(6), 843-858.
- Olof Palme International Center. (2011). Popular Participation Retrieved 20.4, 2012, from <http://www.palmecenter.org/What-we-do/Development-cooperation/How/Popular-participation/>
- OSCE. (2012). Local Communities Retrieved 20.4, 2012, from <http://www.oscebih.org/Default.aspx?id=21&lang=EN>
- PEP International. (2010). Meeting Minutes. Sarajevo.

- PEP International. (2012). Project End Report; Peoples Empowerment in Rural Areas 2009 - 2011. Sarajevo.
- Pidgeon, Nick. (2010). International Dimensions of Climate Change. Report 5: Public Understanding of and Attitudes Towards Climate Change. Cardiff: School of Psychology.
- Roseland, Mark. (2000). Sustainable community development: integrating environmental, economic, and social objectives. *Progress in Planning*, 54(2), 73-132.
- Schwarzenbach, René P., Egli, Thomas, Hofstetter, Thomas B., von Gunten, Urs, & Wehrli, Bernhard. (2010). Global Water Pollution and Human Health. *Annual Review of Environment and Resources*, 35(1), 109-136.
- Semenza, Jan C., Hall, David E., Wilson, Daniel J., Bontempo, Brian D., Sailor, David J., & George, Linda A. (2008). Public Perception of Climate Change: Voluntary Mitigation and Barriers to Behavior Change. *American Journal of Preventive Medicine*, 35(5), 479-487.
- Simioni, D. (2004). *Air pollution and citizen awareness*: United Nations ECLAC.
- Spence, Alexa, & Pidgeon, Nick. (2009). Psychology, Climate Change & Sustainable Behaviour. *Environment: Science and Policy for Sustainable Development*, 51(6), 8-18.
- Steg, Linda, & Vlek, Charles. (2009). Encouraging pro-environmental behaviour: An integrative review and research agenda. *Journal of Environmental Psychology*, 29(3), 309-317.
- The World Bank Group. (2001). Environmental module Retrieved 2.5 2012, from <http://www.worldbank.org/depweb/english/modules/envirionm/index.html>
- UNDP. (2009). Reinforcement of Local Democracy (LOD). Sarajevo.
- United Nations General Assembly. (1948). The Universal Declaration of Human Rights Retrieved 22.4, 2012, from <http://www.un.org/en/documents/udhr/index.shtml#ap>
- Van Der Linden, Sander L. (2011). *Achieving Behavioral Change: Towards a New Framework for Communicating Information About Climate Change. Working Paper*. Paper presented at the Planet Under Pressure Conference, (London March 2012).
- Van Liere, Kent D. , & Dunlap, Riley E. (1980). The Social Bases of Environmental Concern: A Review of Hypotheses, Explanations and Empirical Evidence. *Public Opinion Quarterly*, 44(2), 181-197.
- WHO. (2011). Global Burden of Disease 2008.
- Wiseman, John, Williamson, Lara, & Fritze, Jess. (2010). Community engagement and climate change: learning from recent Australian experience. *International Journal of Climate Change Strategies and Management*, 2(2), 134-147.

Zwierzchowski, Jan, & Tabeau, Ewa. (2010). *The 1992-95 War in Bosnia and Herzegovina: Census-Based Multiple System Estimation of Casualties' Undercount*. Paper presented at the International Research Workshop on 'The Global Cost of Conflict', Berlin.



# Appendix A

## BASELINE STUDY QUESTIONNAIRE

2009

For PERA

Village		Date		Done by		
Municipality		Time		Entered by		
Canton					Code	

### I • LOCAL COMMUNITY (LC)

1. Do you have an established LC Council?

If no or don't know, go to Q 4.

Yes	
No	
Don't Know	

2. Was there a selection process for LC Council?

Yes	
No	
Don't Know	

3. Does your LC Council have female member/s?

Yes	
No	
Don't Know	

4. Does your LC organize regular meetings?

Yes	
No	
Don't Know	

5. Have you received an invitation to a LC meeting, during last year?

Yes	
No	
Don't Know	

6. If yes, how:

Radio/TV	
Internet	
Display Boards	
Flyers	
Open meetings	
Verbal	
Other	

7. Have you attended any LC meetings in the last year?	Yes	
	No	
	Don't Know	
8. Do women participate in these meetings?	Yes	
	No	
	Don't Know	
9. Are you informed about decisions and activities of the LC?	Yes	
	No	
	Don't Know	
10. If yes, how:	Radio/TV	
	Internet	
	Display Boards	
	Flyers	
	Open meetings	
	Verbal	
	Other	
11. Has the LC solved a problem in your village, during last year?	Yes	
	No	
	Don't Know	
12. If yes, what type:	P.	
	R.	
13. Were you personally involved in determining priorities for your village, during last year?	Yes	
	No	
	Don't Know	
14. Have you personally assisted in solving a village problem, during last year?	Yes	
	No	
	Don't Know	
15. If yes, how:	Physical labour	
	Financially	
	Physic.and fin.	
	Other	

16. Would you vote for a female candidate in the LC?

Yes	
No	
Don't Know	

## II • LOCAL GOVERNMENT, CLAIMS AND REPLIES, FINANCIAL SUPPORT

17. Have LG representatives visited your village during last year?

Yes	
No	
Don't Know	

18. Does LG regularly inform citizens about decisions and activities related to the local community?

Yes	
No	
Don't Know	

19. If yes, how:

Radio/TV	
Internet	
Display Boards	
Flyers	
Open meetings	
Verbal	
Other	

20. Has the LG provided you with an opportunity to discuss your problems with its representatives, during last year?

Yes	
No	
Don't Know	

21. Does the LG work in the best interest of citizens?

Yes	
No	
Don't Know	

22. Is it important to pay taxes?

Yes	
No	
Don't Know	

23. Has your LC submitted a written request to the LG for solving a joint problem, during last year?

Yes	
No	
Don't	

If no go to Q. 25.

Know	
------	--

24. Has your LC received a written reply?

Yes	
No	
Don't Know	

25. Has your village received financial support from the LG for solving a problem, during last year?

Yes	
No	
Don't Know	

If no, go to Q 27.

26. Was that financial support aimed at a project/problem that your village prioritized?

Yes	
No	
Don't Know	

27. Have you seen the annual municipal budget openly published?

Yes	
No	
Don't Know	

### III • ENVIRONMENTAL PROTECTION AWARENESS

28. Do you think that your village has a problem with pollution?

Yes	
No	
Don't Know	

29. Is there regular collection of garbage from your home?

Yes	
No	
Don't Know	

30. Is your house connected to a closed sewage system?

Yes	
No	
Don't Know	

31. Do you have your own well for drinking water?

Yes	
No	
Don't Know	

32. Is your drinking water regularly tested for pollution?

If no go to Q 34.

Yes	
No	
Don't	

Know	
------	--

33. If yes, by whom?

You personally	
LG	
Don't know	

34. Does your village organize regular cleaning of the village area?

Yes	
No	
Don't know	

35. Have you been provided with any information on environment protection, during last year (e.g. regulations, directions, etc.)?

Yes	
No	
Don't know	

INTERVIEWEE PROFILE ON NEXT PAGE

INTERVIEWEE PROFILE

<b>1. Age</b>	
<20	
20-35	
35-50	
50-65	
65<	

<b>2. Sex</b>	Male	
	Female	

<b>3. Marital Status</b>	Single	
	Married	
	Other	

<b>4. Education</b>	
No	
Primary	
Secondary	
Higher	

<b>5. Employment status</b>	
Employed	
Self-Employed	
Unemployed	
Season worker	
Illegal work	

<b>6. Status</b>	
Pensioner	
Student	
RVI	
Other	

<b>7. Sector</b>		
Public	Private	

<b>8. Monthly Income KM</b>		
Below min.		
Above min.		
(RS cca. 320)		
(FBiH cca. 430)		
<b>Declined to answer</b>		

Abbreviations:

P. - Public service nature project

R. - Religious object reconstruction

