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The Republic of Srpska / RS Ministry of Physical Planning, Civil Engineering and Ecology

Federation of Bosnia and Herzegovina / FBiH Ministry of Trade

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Japan International Cooperation Agency (JICA)

The Study on Sustainable Development through Eco-Tourism In Bosnia and Herzegovina

Final Report



VOL.3

Plans for Pliva

March 2005

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Final Report

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Abbreviations and Acronyms

AE	Average Elevation
ALS	Average Length of Stay
ARTCHEOSITES	Spatial Integrated Enhancement of Archaeological Sites
AVNOJ	National Antifascist Liberation Council of Yugoslavia
B&B	Bed & Breakfast
BETA	Bosnian Environmental Technologies Association
BHMAC	Bosnia and Herzegovina Mine Action Center
BiH	Bosnia and Herzegovina
CAP	Common Agriculture Policy
CARDS	Community Assistance for Reconstruction, Development and Stabilization
CATV	Cable Television
CBBH	Central Bank of Bosnia and Herzegovina
СВО	Community Based Organization
CEFA	European Committee for Training and Agriculture
CIS	Commonwealth of Independent States
CL	Country Lodging
CMS	Contents Management system
COA	Conservation Orientated Area
CORINE	Coordinate Information on the Environment
CPNM	Commission to Preserve National Monuments
CTF	EU/ Bosnia and Herzegovina Consultative Task Force
CZ	Conservation Zone
CoM	Council of Ministers
DTM	Digital Terrain Model
DXF	Drawing Interchange Format
EC	European Commission
EEA	European Environmental Agency
EFC	Extent for Forest Cover
EIA	Environmental Impact Assessment
EIS	Environmental Impact Statement
EPA	Eco Pliva Association
ETRP	Transport Reconstruction Program
EU	European Union or EURO
EUFOR	European Union Force
EU RED	European Union Regional Economic Development

EUPM	European Union Police Mission in Bosnia and Herzegovina
FAO	Food and Agriculture Organization of the United Nations
FBiH	Federation of Bosnia and Herzegovina
FVO	EC Food and Veterinary Office
GDP	Gross Domestic Product
GFAP	General Framework Agreement on Peace
GIS	Geographical Information System
GNI	Gross National Income
GOBiH	Government of Bosnia and Herzegovina
GOJ	Government of Japan
GPA	Green Pliva Association
GPS	Global Positioning System
GTZ	Deutsche Gesellschaft für Technische Zusammenarbeit (German
	Technical Cooperation)
HNK	Herzegovina-Neretva Kanton
HPT	Hrvastske Posta i Telekomunikacije d.o.o Mostar (Hrvastske Post and
	Telecommunication Company in Mostar)
ICMPD/RIC	International Center for Migration Policy Development/ Repatriation
	Information Center
ICT	Information and Communication Technology
ICT IDA	
	Information and Communication Technology
IDA	Information and Communication Technology International Development Association
IDA IEE	Information and Communication Technology International Development Association Initial Environmental Examination
IDA IEE IF	Information and Communication Technology International Development Association Initial Environmental Examination Interpretation Facilities
IDA IEE IF IFAD	Information and Communication Technology International Development Association Initial Environmental Examination Interpretation Facilities International Fund for Agricultural Development
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Final Report

MPPCEE RS	Ministry of Physical Planning, Civil Engineering and Ecology of the
	Republic of Srpska
MSW	Municipal Solid Waste
MTT RS	Ministry of Trade and Tourism of the Republic of Srpska
MoA	Ministry of Agriculture
MoE FBiH	Ministry of Physical Planning and Environment of Federation of Bosnia
	and Herzegovina
MoFTER	Ministry of Foreign Trade and Economic Relations
NATO	North Atlantic Treaty Organization
NCC	National Council of Churches
NCP	Natural Conservation Grade Point
NEAP	National Environmental Action Plan – Bosnia and Herzegovina
NGO	Non Governmental Organization
NYI	Nevesinje Youth Initiative
OECD	Organization for Economic Co-operation and Development
OHR	Office of the High Representative
OIC	Organization of Islamic Conference
OSCE	Organization for Security and Co-operation in Europe
PCLA	Pliva Country Lodging Associations
PDM	Project Design Matrix
PE	Private Enterprise
PET	Polyethylene terephthalate
PHARE	Preparation of the Legal Regulations for the Environment Protection in
	Bosnia and Herzegovina
PIC	Peace Implementation Council
POA	Preservation Orientated Area
PP	Pilot Project
PPP	Purchasing Power Parity
PRA	Participatory Rural Appraisal
PRSP	Poverty Reduction Strategy Paper
PSA	Pliva Sport Association
PZ	Preservation Zone
PfD	Partners for Development
PfP	Partnership for Peace
QOL	Quality of Life
RD	Road Density
RDA	Regional Development Agency

RS	the Republic of Srpska
S-M	Serbia-Montenegro
S/W	Scope of Work
SAP	Stabilization and Association Process
SARENICA	Telegraphic Agency of New Yugoslavia
SEA	Strategic Environmental Assessment
SEGIR	Support for Economic Growth and Institutional Reform
SFOR	Stabilization Force in Bosnia and Herzegovina
SG	Slope Gradient
SIPPO	Swiss Import Promotion Program
SL	Secondary Legislation
SME	Small and Medium-sized Enterprises
SWOT	Strengths, Weaknesses, Opportunities, and Threats
ТС	Tourist Community
TEM	Trans-European North-South Motorway
TEN-T	Trans-Europian Transport Network
ТМ	Thematic Mapper
TNCP	Total Natural Conservation Point
UEMP	Urban Environmental Management Forum
UHT	Ultra High Temperature
UMCOR	United Methodist Church on Relief
UNDP	United Nations Development Program
UNEP	United Nations Environmental Progaram
UNESCO	United Nations Educational, Scientific and Cultural Organization
UNHCR	United Nations High Commissioner for Refugees
USAID	US Agency for International Development
USDA	United States Department of Agriculture
UXO	Unexploded Ordnance
VA	Velez Adventuring
VAT	Value-Added Tax
VFR	Visit Friend and Relatives
VTA	Velez Tourism Activities
WBA	Water Body Area
WHO	World Health Organization
WTO	World Trade Organization or World Tourism Organization
ZAVNOBiH	Earthly National Antifascist Liberation Council of Bosnia and Herzegovina

VOL.3 - PART C

PLIVA AREA REVIEW AND PILOT PROJECTS



Chapter C 1. Setting of Pliva Study Area

1.1 Socio-Economic Situation

1.1.1 General Conditions

The Pliva Study Area is composed of three municipalities of both entities, Jajce Municipality in the Federation of BiH, and the Jezero and Sipovo Municipalities in RS, respectively. After the war, the Jezero Municipality was newly established by separating a part of the Jajce Municipality along the entity border determined by the Dayton Agreement.

The estimated total Study Area of around 949km² is composed of three municipalities as follows:

Jajce Municipality:	343km ² , 36% of the Study Area, which is a part of Central Bosnia
	Canton
Jezero Municipality:	63km ² , 7% of the Study Area
Sipovo Municipality:	543km ² , 57% of the Study Area

Urban areas have limited developments in each municipality, making up around 4.6km² of the Study Area and less than 1% of each municipal area, respectively.

Agriculture areas in each municipality are mostly identified as pastures or other mixed agricultural use lands as follows:

Jajce Municipality:	132km ² , 38.5% of municipal area
Jezero Municipality:	19km ² , 29.9% of municipal area
Sipovo Municipality:	126km ² , 23.3% of municipal area

Forest and semi natural areas in each municipality are characterized as follows:

Jajce Municipality:	38.7% broad-leaved forest and 13.4% of coniferous forest
Jezero Municipality:	47.3% broad-leaved forest and 13.9% of mixed forest
Sipovo Municipality:	Mixed with 19.6% of broad-leaved forest, 16.5% of coniferous forest,
	15.2% of mixed forest, 12.8% of natural grassland, and 11.5% of
	transitional woodland-shrub

	Category of Ground Cover	Jajce	Jezero	Sipovo	Total
Urban	/ Artificial Area	198	30	233	460
_	Arable land	0	0	0	0
ura s	Permanent crops	49	0	0	49
ricultuı areas	Pastures	5,213	604	4,965	10,782
Agricultura areas	Others	7,941	1,289	7,670	16,901
4	Total	13,204	1,893	12,634	27,731
s	Broad-leaved forest	13,282	2,992	10,618	26,892
Forest and semi natural areas	Coniferous forest	4,608	215	8,954	13,778
ସ୍ଥ	Mixed forest	2,433	877	8,270	11,580
atur	Natural grasslands	0	185	6,961	7,146
li Dê	Moors and heathland	0	0	340	340
sen	Sclerophyllous vegetation	0	0	0	0
, pu	Transitional woodland-shrub	363	134	6,238	6,734
st aı	Bare rocks	23	0	34	57
Dree	Sparsely vegetated areas	0	0	0	0
й	Total	20,709	4,404	41,415	66,527
Water	Surface	190	0	0	190
Total		34,301	6,326	54,282	94,909
Urban	/ Artificial Area	0.6%	0.5%	0.4%	0.5%
_	Arable land	0.0%	0.0%	0.0%	0.0%
ura s	Permanent crops	0.1%	0.0%	0.0%	0.1%
ricultu areas	Pastures	15.2%	9.5%	9.1%	11.4%
Agricultural areas	Others	23.2%	20.4%	14.1%	17.8%
4	Total	38.5%	29.9%	23.3%	29.2%
s	Broad-leaved forest	38.7%	47.3%	19.6%	28.3%
area	Coniferous forest	13.4%	3.4%	16.5%	14.5%
<u>.</u>	Mixed forest	7.1%	13.9%	15.2%	12.2%
atur	Natural grasslands	0.0%	2.9%	12.8%	7.5%
i në	Moors and heathland	0.0%	0.0%	0.6%	0.4%
ser	Sclerophyllous vegetation	0.0%	0.0%	0.0%	0.0%
Forest and semi natural areas	Transitional woodland-shrub	1.1%	2.1%	11.5%	7.1%
st aı	Bare rocks	0.1%	0.0%	0.1%	0.1%
Sires	Sparsely vegetated areas	0.0%	0.0%	0.0%	0.0%
<u> </u> й	Total	60.4%	69.6%	76.3%	70.1%
Water	Surface	0.6%	0.0%	0.0%	0.2%

Table C 1.1 Areas by Category of Ground Cover and Municipality

Source: Ground Cover Data: CORINE, EEA, 2000

Municipality Boundary: Draft Digitization based on the information from Municipalities, 2003

1.1.2 Population Change

Population in the Study Areas has dramatically changed due to the war, especially the ethnic composition in each municipality. Available data for returnees by ethnic group in each municipality is still incomplete. Some resettled returnees eventually returned to the country to which they fled to or to other areas altogether, because of the economic situation, as well as difficulties to resettle in the Study Area and BiH in general. Official statistical data on population and households are not available in BiH after the war. The population and household data used in this Section were obtained from each municipal government and the web pages of international agencies.

All three municipalities were popular tourist destinations in the Ex-Yugoslavia, and currently suffer from the lack of resources, chronic unemployment and high level of poverty. Before the war, population in the Pliva Study Area was around 63,000, which amounted to 66.5 person/km² in the gross Study Area and 137 person/ha in the net urban area. Most towns and settlements were located along the Pliva River and its tributaries.

(1) Jajce

Jajce was once the seat of the Bosnian Kingdom (circa 1500s). It was in Jajce, during World War II, that Martial Tito and the Partisans issued a declaration stating that BiH stood united to fight the fascists and all peoples were equal. During the recent war, many houses on the outskirts of the town were destroyed, and while the town center itself saw less damage, there were much looting and burning - particularly of Muslim residences. The town is still somewhat divided between Croats and Bosniaks. Jajce has a large returnee population of both Serbs and Bosniaks, but the majority of returnees are Bosniaks. Originally with around 45,000 residents before the war, the population amounted to 39% of the pre-war population (or 17,500) as of 1999 and 70% of the pre-ware population (or 31,500) as of 2004.

(2) Jezero

During the recent war, many private houses in Jezero were destroyed. Originally with around 2,600 residents before the war, the population amounted to 57% of the pre-war population (or 1,500) as of 1999, and 65% of the pre-ware population (or 1,700) as of 2004.

(3) Sipovo

During the recent war, Sipovo changed hands many times and in the last battle for the town, over 1,200 houses were destroyed. To date, the international community has rebuilt

approximately half of the destroyed houses. Originally with around 15,600 residents before the war, the population amounted to 81% of the pre-war population (or 12,600) as of 1999, and 84% of the pre-ware population (or 13,000) as of 2004. One of the largest SFOR bases in BiH was located in the Municipality. It is reported that it has been closed.

Ethnicity		Bosniaks	Serbs	Croats	Others	Total	Increase	Ratio (%)	Household (size)
	Pre-war	17,380	8,663	15,811	3,153	45,007	-27,507	-61%	NA
Jajce	May, 1999	3,978	795	12,727	0	17,500	-27,507	-0170	NA
Jajce	Jan. 2004	NA	NA	NA	NA	31,549	-13,458	-30%	7,758
									(4.1)
	Pre-war	781	1,480	241	73	2,575	-1,116	-43%	NA
Jezero	Jul. 1999	153	1,303	3	0	1,459	-1,110	-4570	NA
	Jan. 2004	NA	NA	NA	NA	1,685	-890	-35%	726 (2.3)
	Pre-war	2,998	12,318	33	204	15,553	-2,994	-19%	NA
Sipovo	May, 1999	225	12,329	5	0	12,559	-2,994	-1970	NA
Sipovo	Jan. 2004	NA	NA	NA	NA	13,000	-2,553	-16%	4,000
									(3.3)
Pliva	Pre-war	21,159	22,461	16,085	3,430	63,135	-31,617	-50%	NA
Study	1999	4,356	14,427	12,735	0	31,518	-31,017	-30 %	NA
Area	Jan. 2004	NA	NA	NA	NA	46,234	-16,901	-27%	12,484
Aica									(3.7)

Table C 1.2 Population by Ethnicity and Municipality

Source: Pre-war and 1999 data: Web site of ICMPD/RIC (International Center for Migration Policy Development/ Repatriation Information Center)

Jan. 2004 data: Each Municipal Government (Through JICA Socio-economic survey, January 2004)

1.1.3 Socio-Economic Conditions

The overall socio-economic conditions of people in the Study Areas are reviewed from the results of a socio-economic survey, consisting of 300 sample home interviews, conducted by the sub-contracted local consultant. Local residents live in poor conditions and many, if not most of the people, are unemployed. Most people are enthusiastic about the Eco-Tourism Development and possible project implementation.

(1) Educational Attainment and Language

Those with higher educational degrees account for 30% of respondents in Sipovo, 13.5% in Jajce, 4% in Jezero and 17% in the area, respectively. The majority of respondents having obtained a secondary education, account for 70% of all respondents in Jajce, 63% Jezero, 50% in Sipovo and 62% in the area. Respondents with foreign language skills account for 24% in Sipovo, 19% in Jezero, 18% in Jajce and 19% in the total area.

(2) Employment Conditions

Those that are employed comprise 74% of all respondents in Sipovo, 39% in Jajce, 18.5% in Jezero and 47% in the area, respectively. Of those employed, 86% work in the tertiary sector, while 14% work in the secondary sector. The majority of secondary sector worker are involved with the wood industry (60%) and the energy industry (20%).

(3) Problems on Agricultural Performance

Around 60% of employed respondents reported problems with performance due to the lack of technical skills (73%), financing (12%), transportation (7%), and working space and legal matters.

(4) Employed Family Members

The majority of family members are unemployed. For instance, 78% of respondents in Jezero, 60% in Jajce (16% in Sipovo) and 48% in the Area, respectively, Note that other family members are not employed. The total number of employed family members of respondents in each municipality only comprises 6% of the total family members in Jezero, 19% in Jajce and 29% in Sipovo.

(5) Family Income and Expenditure

Families with monthly incomes of less than 300KM in each municipality comprise 93% of all responding families in Jezero, 55% in Jajce, 42% in Sipovo and 58% in the area, respectively. The estimated average monthly family income is around 440KM in Sipovo, 380KM in Jajce, 220KM in Jezero and 370KM in the Area. Respondents, whose monthly expenditure is more than the monthly family income, made up 100% of respondent in Jezero, 92% in Jajce, 84% in Sipovo and 91% in the Area. In Jezero, 70% of respondents indicated that the required monthly family income is 300-500KM, while in Jajce and Sipovo, 77% and 56%, or respondents indicated a required monthly family income of 500KM. The average required monthly incomes are estimated as 460KM in Jezero (2.1 times the existing average income), 620KM in Sipovo (1.4 times), 690KM in Jajce (1.8 times) and 620KM in the area (1.7 times).

(6) Living Conditions

The majority of respondents stated that their living conditions are either Very Bad (12% in Sipovo, 31% in Jajce, 48% in Jezero and 28% in the area) or Bad (34% in Sipovo, 30% in

Jajce, 37% in Jezero and 33% in the area). Those that do not live on their own property, make up 20% of respondents in Jajce, 11% in Jezero, 10% in Sipovo and 15% in the Area.

(7) Inter-Entity Relationship

Respondents, who have relationships with other entities, make up 46% of respondents in Sipovo, 24% in Jajce, 7% in Jezero and 29% in the Area, respectively. Those relationships making up the highest proportion of responses includes personal relations (20%) and professional relations (7%).

(8) Economic Situation

Most respondents indicated Very Bad or Bad. For instance, 96% of respondents in Jezero, 89% in Jajce, 54% in Sipovo and 69% in the Area respectively indicated Very Bad or Bad. Those responding Good comprise 8% of respondents in Sipovo, 5% in Jajce, 0% in Jezero and 5% in the Area.

(9) Expectation for Eco-Tourism

A large majority of respondents stated that Eco-tourism Development in the area would improve their poor economic and living conditions. Respondents, who expect eco-tourism development, accounted for 96% of respondents in Sipovo, 97% in Jajce, 67% in Jezero and 91% in the Area.

(10) Belief in Future Economic Improvement

There is some disparity in the responses, as 72% of respondents in Sipovo stated YES, while only 53% in Jajce, 30% in Jezero and 55% in the Area did so.

1.1.4 Issues in the Pliva Study Area

According to the results of the socio-economic survey of residents in the three municipalities, respondents who reported that they *did not* believe in future economic improvement said this was due to:

- Politics;
- Their experiences;
- Young people leaving for bigger cities in BiH or for other countries;
- Overall disappointment;

- Lack or poor health service;
- Unemployment;
- Lack of appropriate technology;
- Poor economy;
- Improper laws and enforcement; and
- Passive mind of peoples.

According to a survey research conducted by Green Visions and subsequent research conducted by the JICA Study Team the human resource conditions of the people residing in the towns of Jajce, Jezero, and Sipovo were identified and evaluated. These findings are important in that they define a setting within which the JICA projects must work. A summary of the research findings is presented in the remainder of this section.

Jajce, Jezero and Sipovo were all popular tourist destinations prior to the recent war, and currently suffer - like most of BiH - from chronic unemployment, shortage of various resources and prevalence of poverty.

People are generally enthusiastic about the JICA Study but at the same time suffer from a lack of optimism regarding the future. A small majority of respondents in overall said they believed in future economic improvement, while most people in Sipovo and Jajce said that they did so. But a large majority of the respondents in Jezero said they did not believe in future economic improvement.

Overall, conditions in Jezero appear to be worse than those in either Jajce or Sipovo, and the greatest disparity tends to be between Jezero and Sipovo. As reported, Jezero has the highest level of unemployment, the lowest monthly incomes, and the largest number of respondents who assessed both their living conditions and their economic situation as 'very bad'. However, as was the case in both Jajce and Sipovo, a large majority of the respondents in Jezero said they thought that the development of eco-tourism in their area would improve their economic and living conditions.

In Jajce, unemployment levels were also reported as high, and income levels as low, with the majority of respondents reporting incomes of less than 300KM per month. Respondents in all three areas stated that they needed incomes of over 500KM to cover monthly expenditures. The majority of respondents in Jajce also assessed both their economic and living conditions as 'very bad', but these figures were not as high as those in Jezero.

Conditions in general seem, relative to Jezero and Jajce, to be better in Sipovo. Respondents here reported the highest levels of employment, at over 70%, the highest number of people earning over 500KM and, as might be expected, the largest number of respondents who assessed their living conditions as 'satisfactory'. However the majority of respondents here also assessed the economic conditions as 'bad'. Of those employed most work in the tertiary sector and in the wood industry. The majority of respondents who are employed stated that they lacked technical resources to work more effectively.

Most of the respondents view the overall state of the economy, current politics and the legal environment as the biggest obstacles to development. But, despite these common problems and the obvious advantages to working together on any solutions there is very little inter-entity cooperation and the small number who reported having inter-entity relations said that these were personal.

1.1.5 Eco-Tourism Development Potentials in Local Community

(1) Potential of Pliva Local Community for Eco-Tourism Development

Jajce, Jezero and Sipovo were all popular tourist destinations prior to the recent war. Given the natural resources in the area as well as the people's knowledge and belief in the benefits of eco-tourism development, these three communities are well placed to implement a pilot eco-tourism focused project.

Regarding possible tourist attractions in these three municipalities, Jajce reported the best in historical buildings and Sipovo the best in nature attractions. Overall, the majority of respondents from all three areas stated that there were nature attractions for tourists in the region, which is an evidence of people's awareness of both the beauty of the natural environment in this region and of its potential as a tourist resource. The limited respondents in the areas have foreign language skills.

Respondents listed the following as possible **regional attractions** for tourists:

- 1) Historical tourism resources:
 - Jajce Old Town, fortress, catacombs, St. Luke's Tower, Medvjed Tower and Esma Mosque; and
 - Sokograd (old summer palace); ancient and Roman roads, standing tombstones in Sipovo.

- 2) Cultural and traditional attractions:
 - Folklore, theatre games, national costumes, traditional foods.
- 3) Natural Resources:
 - River Pliva, Plivsko Lakes, waterfalls; and
 - River Janja, Vadanjska Cave, Janjski Islands.

1.2 Development Strategies Discussed in Focus Group Meetings

Visions of community and approaches to achieve the visions were discussed in the six focus group meetings held in June 2004. These focus group meetings were conducted as a part of survey for Community Based Organizations. The very basic desire of the participants was income generation through eco-tourism and agriculture. At the same time, they are very aware of the importance of the sustainability and promotional aspects for these two industries.

1.2.1 Social Development of Pliva Area

The meetings discussed the vision of the communities in 10 - 20 years from the present. Participants agreed that following goals should be achieved in the Pliva Area.

(1) Employment

Unemployment of the area is such a severe problem that every participant mentioned this and had some ideas how to mitigate this. Approaches to fulfill the vision include development of organic food and tourism.

(2) Respects among People

Many participants desire tension-free society among the ethnic groups and among any individuals. They believe that a broader cooperation bears more fruit.

(3) Clean and Beautiful Region

People want beautiful community without garbage littering and without air or water pollution. Pliva River and its lakes carry significant amount of garbage. A heavy industry factory along the Route M17 causes considerable air pollution. They realize that this situation is not acceptable if the area is to become a quality eco-tourism destination.

1.2.2 Agricultural Development of Pliva Area

Participating farmers recognized the necessity of change from subsistence agriculture to commercial agriculture. Visions and approaches to reach the visions were mentioned as follows:

(1) Developing Agriculture in All Sub-sectors

They wanted to develop all kinds of agricultural activities (farming, forestry, fishery and live stock) and make them competitive. Approaches mentioned were maximum benefit, market place, agricultural infrastructure, training, certificate for export, involving young people, etc.

(2) Agriculture as Promising Industry

A few people believe that agriculture is a good business and should be an investment target. In order to make this industry prosperous, farmers need good practice as a sample case and dissemination of such a sample.

(3) Competitive Products in the World

Since the BiH food market is not protected and very few food items are accepted for export, it is essential for the local farmers to fortify their competitiveness. They need laws and regulations to be changed, establishing criteria for quality production as well as training to achieve this objective.

1.2.3 Eco-Tourism in Pliva Area

As visions of tourism in the region, majority of participants agreed on the following:

(1) Clean Environment

Participants recognized that they have several approaches for this issue such as building garbage disposal site, garbage selection and recycling system, education, and so on.

(2) Accessible Cultural and Historical Monuments

People of Jajce are proud of their medieval monuments and want restoration and protection as well as development of access roads to the cultural and historical monuments.

(3) Foreign Ttourists

Participants know that foreign tourists spend much more money than domestic ones. In order to develop more profitable tourism they think they should receive more foreign tourists through government initiative, financial support, and marketing.

1.3 Natural Conditions and Environment

1.3.1 Natural Conditions

(1) Regional Climate

The Pliva Study Area belongs to the moderate-continental climate type; while the surrounding high mountains belong to sub-mountainous and mountainous climate type with severe winter and moderate summer. Table C 1.3 shows recent twenty-five-year temperature records in the Pliva Study Area. The coldest month is January with average temperatures of -0.7°C in Jajce and -1.1°C in Sipovo, while the warmest month is July with average temperatures of 19°C in Jajce and 18.6°C in Sipovo.

Table C 1.3 Monthly Average Temperatures in the Pliva Study Area

												Unit: °C
Station	Jan.	Feb.	Mar.	Apr.	May	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.	Dec.
Jajce	-0.7	1.4	5.4	9.8	14.3	17.5	19.0	18.7	15.3	10.7	5.8	1.5
Sipovo	-1.1	1.6	5.3	8.6	14.7	17.1	18.6	18.5	14.8	10.5	4.6	-1.0

Source: State Hydro Meteorological Institute, BiH

One of the climate characteristics of the valley areas is frosts and fogs. In these valleys, there are 94 days on average with frost from September to May.

Table C 1.4 shows precipitation in the Pliva Study Areas. Annual average precipitation in Jajce and Sipovo is approximately 1,000mm. One of the salient characteristics is the relatively large number of days with precipitation per year. For example, the number of days with precipitation of more than 0.1 mm is 147 days per year in Jajce.

Table C 1.4 Monthly Average Precipitation in the Pliva Study Area

												Unit: mm
Station	Jan.	Feb.	Mar.	Apr.	May	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.	Dec.
Jajce	60.8	63.9	59.6	67.1	92.2	97.6	79.7	81.6	72.5	75.0	90.1	87.6
Sipovo	68.5	66.0	64.4	78.9	80.6	93.5	89.4	839	88.6	76.6	85.3	93.4

Source: State Hydro Meteorological Institute, BiH

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The Pliva Study Area has snow usually from October to May. Table C 1.5 the average number of days with snow cover of more than 1cm in the Area according to thirty-year period records.

											U	nit: days
Station	Jan.	Feb.	Mar.	Apr.	May	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.	Dec.
Jajce	17.3	13.3	4.3	0.6	-	-	-	-	-	0.1	3.2	11.6

Source: State Hydro Meteorological Institute, BiH

Average elevations of the main towns and the surrounding zones are as follows:

- Jajce, Jezero and the surrounding zone: 591m
- Sipovo and the surrounding zone: 608m

(2) Geological and Soil Conditions

In terms of geological substratum, the Pliva Study Area is heterogeneous and uneven. In terms of soil, the Study Area as a whole is mainly covered by a combination of the following soil types. The characteristics of each soil type are summarized in Table C 1.6.

Type of soils	Remarks
Lithosols	These are undeveloped soils, which have formed on solid limestone and
(rocky ground)	dolomite.
()0 /	The soil is mainly in the valley of the Vrbas River in Pliva Study Area.
	The possibility of rooting for the plants is very limited.
Calcomelanosol	This soil is a humus accumulative soil, which is more often combined with
	rock and brown soils.
	The soil is the most widespread mainly on steep inclined mountainous
	terrains in the whole Study Area.
	This soil is not suitable for intensive plant production.
Rendzina	The soil is an also humus accumulative soil.
	The soil is only in southeast of Sipovo municipality.
	If the height of the soils allow, these soils are suitable for farming.
Vertisol	Geological base for the soil is made of substrata rich with clay fraction. The
	soil is only in east part of Jajce Municipality.
	It is difficult to cultivate, however, there are very valuable due to high
	fertility potential for agriculture.
Distric cambisol	This soil is formed on acid silicon substrata.
	This is spread in the central and northern part of Sipovo, southwest of
	Jajce municipality. The soil is primarily good forest habitats. But it is not
	well suitable for agriculture production due to erosion risks.

Table C 1.6 Main soil ty	pes in the Pliva	Study Area
	pes in the rinva	oluay Alca

Type of soils	of soils Remarks				
Calcocambisol	The soil is mainly associated with black soils, rendzinas, and luvisols. The soil is widespread in mountainous regions in Pliva Study Area.				
	The soil is rarely used for agriculture production due to low depth, surface stoniness, and other reasons.				
Luvisol	 The soil is mainly related to the humid regions and more flat terrains. The soil is diffusely distributed across entire territory of the Jajce, and Sipovo municipalities. The soil is not well suitable for agriculture production due to limited natural fertility. 				

Source: Sarajevo University, Faculty of Agriculture JICA Study Team

(3) Hydrology and watershed

There are relatively large rivers, which have large catchments areas in the Pliva Study Area. The characteristics of the main rivers and lakes are shown in Table C 1.7.

Rivers and Lakes	Remarks				
Pliva River	Length of the river: 29.5km				
	Catchment area: 1,350km ²				
	The River is alternating change of the course from the swift mountain with				
	low depths in upper course to the valley downstream form Sipovo with				
	deep depth.				
	Pliva waterfall: approximately 15m height				
Janj River	Length of the river: 14.5km				
	Catchment area: 336km ²				
	The River runs through along various canyons and sheer rocks.				

Table C 1.7 Main Rivers and Lakes in the Pliva Study Area

Source: JICA Study Team

These watercourses are main water sources as well as main tourist destinations in the Area.

(4) Vegetation, Forest and Land Cover

Characteristics of vegetation and forest in the Study Area are as follows:

In the Pliva Study Area as well as in the whole Central Bosnia, forest is the dominant type of vegetation. It is very developed and covers more than 50% of the entire area. The Area belongs mainly to the biome of moderately humid broad-leaved deciduous forests of oak and hornbeam. Dark coniferous forests are fragmentarily distributed in southern and central parts of Sipovo municipality. The pasture vegetation is also developed in the Area. In terms of agricultural plants, the most representative crops are potato, wheat, corn, and vegetables in the hilly areas.

Table C 1.8 shows present land cover by each municipality of the Pliva Study Area.

(5) Natural Disasters

In the Pliva Study Area, no significant earthquakes and floods occurred except an earthquake in Jajce in 1923 and a flood in 2003, according to a recent one hundred years record by Hydro-Meteorological Institutes in Banja Luka.

1.3.2 Natural Environment

(1) Biodiversity

The Study Area is of relatively high diversity.

Jajce to Sipovo areas are located in the lowlands within the mountainous areas. This terrain is rather heterogeneous in terms of geo-morphology such as slopes of Vitrog in the south parts, valleys of Pliva River and its tributaries in the central part, while Vrbas River valley forms the eastern border. The areas belong mainly to the biome of moderately humid broad-leaved deciduous forests of oak and hornbeam. Complex ecological factors provide conditions not only for the development of mesophile, but also thermophile forms of forest vegetation.

(2) Flora and Fauna

Three endemic plants, which are economically valuable such as young yellowish and 35 significant medicinal herbs such as woodruff (Asperula odorata), Belladona (Atropa beladonna) are confirmed in the Pliva Study Area, according to the Institute for Urbanism. Also, some of the valuable edible mushrooms such as boletus, chanterelle are found in the Area.

It is reported that brown bear, black grouse, wild boars, wolf, deer, fox, and lynx are found in Sipovo area. Otter and bats, which are registered as vulnerable species in the "2000 IUCN Red List of the Threatened Animals", are found in Sipovo and Jajce area. Also, some birds for hunting such as grouse are confirmed in the Area. However for the habitats or distribution areas for the above-mentioned valuable species, it is very difficult to identify them due to few scientific researches in the Subject Area.

						Unit: ha
Land Cover Municipality			Total			
	Land Cover		Pliva Study Area			
Level 1	Level 2	Level 3	Jajce	Jezero	Sipovo	
Artificial surfaces	Urban fabric	Discontinuous urban fabric	173	30	207	410
	Industrial, and commercial, and transport unit	Industrial, or commercial units	25	0	0	25
	Mining, dump and construction sites	Mineral extraction sites	0	0	26	26
areas	Arable land	Non-irrigated arable land	0	0	0	0
	Permanent crops	Vineyards	0	0	0	0
		Fruit trees and berry plantation	49	0	0	49
	Pastures	Pastures	5,213	604	4,965	10,782
	Heterogeneous agricultural areas	Complex cultivation patterns	4,997	537	4,302	9,836
		Land principally occupied by agriculture, with significant areas of natural vegetation	2,945	752	3,268	6,965
Forest and	Forests	Broad-leaved forest	13,282	2,992	10,618	26,892
he ve as Op litt		Coniferous forest	4,608	215	8,954	13,777
		Mixed forest	2,433	877	8,270	11,580
	Scrub and/or	Natural grasslands	0	185	6,961	7,146
	herbaceous	Moors	0	0	340	340
	vegetation associations	Transitional woodland-shrub	363	134	6,238	6,735
	Open spaces with	Bare rocks	23	0	34	47
	little or no vegetation	Sparsely vegetated areas	0	0	0	0
Water bodies	Inland waters	Water courses	190	0	0	190
Total			34,301	6,326	54,282	94,909

Source: CORINE Land Cover Data, European Environmental Agency (EEA), 2000

1.3.3 Protected Areas System

In the Pliva Study Area, the reservation of Janj Virgin Forest was established in 1954 as a protected area. It ranges the westwards from the peak Mt. Stolovas (1,476m). The total reservation area covers 295ha (see Figure C 1.1). The core-zone (Ia IUCN Category, strongly protected area exclusively for scientific purpose) takes 55.8ha of the total area. The outside of the core-zone belongs to wildness zone (Ib-IUCN Category, wildlife protection zone), according to Forestry Faculty Banja Luka. The area is managed by Public Enterprise of Forestry and State Forest Enterprise as one of the "Nature Reserve" by "Physical Planning 1981-2000 in BiH", which was authorized by "Physical Planning Law, 2003".

The main fauna of the area are brown bear, black grouse, wild boar, wolf, deer, fox, pine marten, rabbit, duck, and others. In terms of vegetation, the Janj wild forest is mainly composed (approximately 95%) of climate regional trees of beech, fir, and spruce, which appear between 1,180 and 1,470m. The sub Alps beech-trees only cover about 4% of the total surface in the south part above 1,470m above sea level.

Also, each municipality proposed a total of 19 protected areas in the Study Area, which are mainly naturally rare and beautiful places such as caves, and river springs in the Study Area at present, although the selection criteria and the boundary of each protected area are not clear.

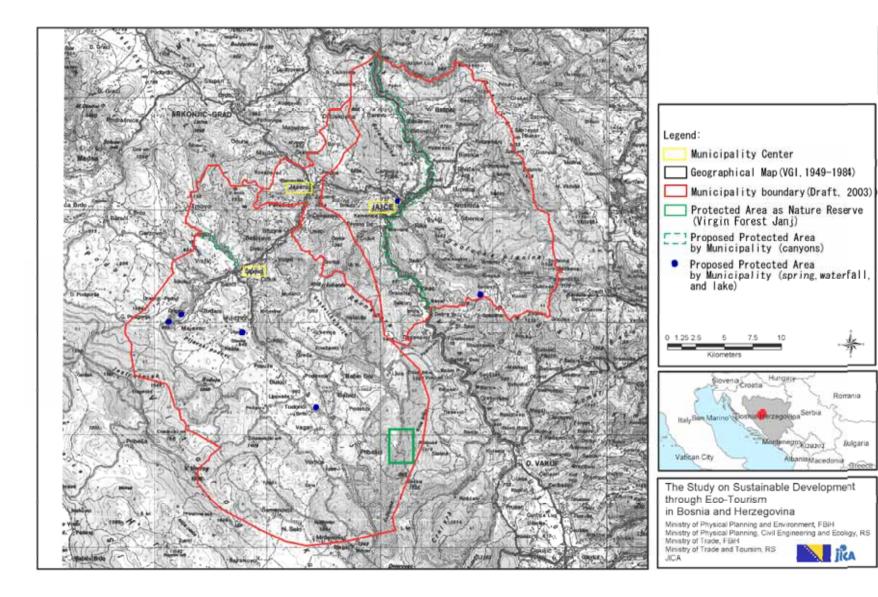


Figure C 1.1 Present Protected Area in Pliva Study Area

1.3.4 Environmental Problems

In the Pliva Study Area, it is observed that garbage is scattered along the access roads and river basins of the residential areas as well as tourist sites. Also, some bacteria problems in the water bodies near the residential areas may occur due to insufficient wastewater treatment. In terms of impacts on flora and fauna as well as biodiversity, it is very difficult to identify problems due to few relevant scientific researches in the Study Area.

The present environmental conditions including potential problems in Pliva Study Area are as follows:

- Scattering of garbage along the Pliva River and in Jezero lake;
- Air pollution and authentic problems by smokes by existing factories at Jajce;
- Water contamination risks due to discharges from residents without treatment; and
- Illegal logging and forest fire in the forest areas at Sipovo and Jajce.

It is reported that some air pollution problems are caused by the operations of the factories at Jajce (rare-metal refining factory) area. On the other hand, it is reported that water qualities such as Pliva River and Janj River are at satisfactory levels at present.

1.4 Urban Environment

In the Pliva Area, habitats are not dense even in the built-up areas, as multi-stroried residential, office and/or commercial buildings are hardly seen. Moreover, destroyed industrial facilities are abondoned or not rehabilitated. The prevailing economic situation has therefore diffused the agglomeration and has hindered the growth of more-conspicuous urban cores usually seen in other municipalities.

As a result, present built-up portion of the three municipalities in the Pliva Area amounts to more or less 0.4% - 0.6% of each municipal area.

However the physical dimensions of the built-up areas of each municipality are rather varied a Northwestern strip (Jayce) of 2.0km x 0.5km, along Pliva, a Northsouthern strip (Sipovo) of 2.0km x 1.0km, centering on the confluence of Rijeka, Yani and Pliva, and a scattered community of Jezero on both banks of the Pliva River.

Here, an overview of the three aspects of urban environment - air, water, and solid wastes - is given. State of the environment given below, however, is solely based on site obervations

and are not based on monitored data, as such data, except those of water quality for drinking water, are not sujected to regular sampling and physico-chemical and biological analysis.

With respect to ambient air quality in the Pliva Area, incidences of air pollution are reported by occasional burning of wood wastes from sawmill operation. Such smoke emissions from sawmills, cooled and solidified in the air, falling and reaching the ground and surface waters, are supposed to be toxic, due to incineration of wood preservatives.

Observed urban traffic, both through traffic and intra-town traffic, is not so heavy so as to cause any significant air pollution problem, in the limited urban space of those three municipalities.

Smoke emissions from a stationay source of a metal smelting plant at Jayce pose a constant source of citizens complaints. It is the target of intense complaints from residents, apprehensive of respiratory diseases. From the heights of the old town part of Jayce, the standing smoke plume belched from the smelting plant is so conspicuous. It also represents, by many, a visual intrusion against the backdrop of Jayce's hilly forest and pasture landscape.

Discharges of Municipal Solid Waste (MSW) and domestic waste water in the Pliva River Basin represent a potential threat that directly affect people's living conditions dependent on its water quality.

In the Pliva Area, water pollutant loads are mostly generated from domestic discharges and least from industrial discharges, as there are few active manufacturing industrial base in the area, except a Ferro-silicon smelting plant at Jayce. Only a limited coverage of sewerage system (with treatment) in the built-up zone is provided in Jayce, however. Shipovo has a drainage system without treatment and Jezero virtually has even no drainage system.

Domestic waste water discharges, not connected to any sewerage systems, find its way into nearby channels and watercourses in and around the residential area to yield inland water bodies overloaded with pollutant loads, making them highly eutrophic and their sediments anaerobic. Growth of algaes and septic ordors at those streams, tributary to the Pliva River, are evident in summer. However, highly waste-loaded waters finally are channelled to the main Pliva River, where they are diluted by an overwhelming volume of unpolluted water. At present, water quality of the main Pliva River is observed to have a higher dissoved oxygen content above health standards, upstream of the confluence with Josafka (at Jezero). By visual inspection, above the two barrages, bridged by an aquacluture facility, at Jezero,

transparency seems to be high enough and an abundance of submersed plants are observed to be grown in summer at any points of the river section. Below that point, the Pliva River streams into the the Veliko Plivsko Lakewater, where rapid waters disappear and the Lake water seems to increase turbidity due to domestic effluents from communities, however, its quality does not seem to be below standards required by the water-based recreational use. However, a 1km reach of Pliva running south of the Districts - Tekija, Volijak, and Katina, above the confluence with the Vrbas River seems to be heavily polluted due to discharges of untreated Jayce sewer effluent and drained solid wastes afloat the water body.

With respect to pollution by municipal solid wastes (MSW) in the Pliva Area, an abundance of small-scale disposal sites are observed, unattended by municipal services, at any place nearby residential households, and roadsides by shopkeepers and restaurants. More often such sites are seen in the rural part of the Municipality. Such incidences of illegal dumping degrade the quality of townscape and healthy living environment. Collection services are not frequent enough, nor the entirety of built-up areas are covered.

Often it is the case that uncollected plastics - bottles and bags - are channelled to nearby streams by rain water and wind to reach main water body of the Pliva River system (including the reaches of the Lake Veliko Plivsko and the Lake Malo Plivsko). Such plastic wastes are either trapped by riverine bushes and bows or by driftwoods afloat in the stream, and are conspicuous anywhere along all reaches of the Pliva River.

In view of the landfill, not all municipalities maintain offical dumping sites, nor they are equipped with appropriate shields to prevent leachate seepage to the groundwater and proper collection and treatment facility of leachates provided. Untreated leachate streams into the narrow valleys, eventually to reach upstream tributaries of the Pliva River, where septic order and black sediments indicate a level of eutrophication.

Chapter C 2. Analysis of Current Tourism Situation in Pliva

2.1 Inbound Tourists to Pliva (Roadside Interview Survey)

- (1) Survey Conducted:
 - 16 working days in 4 weeks (2 weekdays and 2 weekend days each) from August 5 through 29 at the two pre-determined survey locations (one on the main road in Jajce (M-5, proposed site for Eco-House) and the other at Jezero / Sipovo junction)
- (2) Traffic Counts
 - 1) Jajce
 - Total Vehicle Number: 21,490 (100%), of which Passenger car 18,041 (84%), Pick-up 1,369 (6%), Motorcycle 250 (1%), Bus 273 (1%), Truck 1,557 (8%)
 - Total of Passenger car, Pick-up and Motorcycle: 19,660, of which Domestic 13,811 (70%) and Foreign 5,849 (30%). For all traffic, Domestic around 70% and Foreign around 30%
 - Total Weekday Vehicle Number: 10,498
 - Total Weekend Vehicle Number: 10,992 (5% higher than weekday traffic)
 - 2) Interpretation
 - Passenger car dominant at 84%, with all other categories less than 10%
 - Domestic passenger cars occupy the majority of 64% of the total traffic whereas Foreign 27% only, remaining 9% of Bus / Truck (no distinction of Domestic and Foreign¹), testifying fairly substantive foreign visitation
 - Weekend Number 5% more than Weekdays
 - 3) Jezero-Sipovo
 - Total Vehicle Number: 14,422 (100%), of which Passenger car 11,755 (81%), Pick-up 1,311 (9%), Motorcycle 101 (1%), Bus 165 (1%), Truck 1,090 (8%)
 - Total of Passenger car, Pick-up and Motorcycle: 13,167, of which Domestic 10,477 (80%) and Foreign 2,690 (20%)

¹ Some technical note:

Due to practical difficulties during the on-site interviews, Domestic/Foreign separation was not made for Buses and Trucks on some weeks, causing data inconsistency to compare across all the categories of vehicles.

- Total Weekday Vehicle Number: 7,276
- Total Weekend Vehicle Number: 7,146 (98% of weekday traffic)

4) Interpretation

- Similar trend as in Jajce: Passenger car dominant at 81%, with all other categories less than 10%
- In contrast to Jajce, Domestic occupies strong majority of 80% with Foreign of 20% only, testifying dominant domestic visitation for Jezero-Sipovo
- In contrast to Jajce data, Weekend Number 2% lower than weekday traffic

(3) Passenger Interviews:

- Number of Vehicles Interviewed: 887, of which 2 passengers per vehicle (p/v) dominant at 34%, followed by 3 p/v at 25%, 4 p/v at 24%. This means that 2-4 passenger per vehicle occupies the strong majority of 83%;
- Country of Residence per vehicle: 887, of which major countries are Germany 24%, Austria 21%, Croatia 14%, Serbia-Montenegro 8%, Sweden 6%, Slovenia 6%, Italy 5%, Switzerland 4%. In other word, EU (excluding Slovenia that joined EU this year) occupies 60%, while Ex-Yugoslavia neighbors accounts for 28% (including Slovenia);
- Where are you traveling to?: Dominant majority of 93% answered BiH, making other cited destinations almost negligible e.g., Croatia and Austria 2% respectively, Germany 1% and others (Slovenia, Serbia, Sweden, etc.) less than 1%. This translates that 93% of all vehicles are, in one way or the other, related to Visit Friends and Relatives (VFR) in BiH;
- Purpose of Trip: Visit Friends and Relatives (VFR) dominant at 40%, followed by Tourism 25%, VFR and Tourism combined 25%, and Business 5%;
- Will you buy local products at Eco-House?: Fairly high 53% answered Yes, 22% say Maybe, 6% say Depend on Price, and 17% gave No Answer. Yes and Maybe combined at 75% gives a healthy prospect for Eco-House project implementation;
- What Kind of Tourism: Out of 887 vehicles, 583 or 66% stated their visits are in some way related tourism. Among 583 vehicles, 52% answered Eco-tourism, 20% say Culture tourism, 18% Sport tourism (rafting, canoeing, etc.), 4% Spa tourism, 3% respectively for Religious and Winter tourism. It is reasonably surmized that low percentage of Winter may have strong linkage with the summer (August) survey

timing, in other words, Winter tourism may gain a higher percentage in case of Winter survey; and

How long will you stay in BiH?: 29% answered 1-2 weeks, followed by 26% for 2-3 weeks, 22% for less than 1 week, and 9% for 1-2 months. 55% or more than half of the total answered relatively long stay of 1 to 3 weeks, again giving a bright prospect for Eco-House project and Eco-tourism activities. It can be reasonably surmized that Visit Friends and Relatives visitors do not utilize Eco Lodges in the Study Areas, preferring to stay with their Friends and Relatives.

2.2 Tourism Resources

2.2.1 Outline of Tourism Resources

- (1) Nature
 - 1) The Pliva River, Janj River, and Plivsko Lakes are the major resources. The entire Pliva River valley provides abundant flora and fauna rare in other parts of Europe;
 - 2) The sources of the Pliva River are two enormous underground springs that discharge the second largest amount of fresh water in all of Europe; and
 - The Great and Small Plivsko Lakes that are located between Jezero and Jajce provide world-class sites for kayak and rowing competitions as well as scenic areas for recreation.



Spring of the Janj River



The Pliva River

(2) Culture and History

- 1) With historical resources, old town in Jajce is the most significant resource. This old town has a uniquely medieval atmosphere. However, some monuments are left collapsed, waiting restoration;
- 2) Jajce is also a historically important place concerning with the founding of Ex-Yugoslavia; and
- 3) Also in Sipovo, the historical heritage of Roman or medieval ages exists. However, their use in tourism is not actualized.





Old millhouse in the Janj River

Wall of Jajce

- (3) Recreation and Sport Activities
 - Outdoor activities of hunting, fishing, and mountain climbing are being practiced. Especially, hunting has a long tradition in Sipovo and hunters including those from neighboring countries visit designated hunting areas; and
 - 2) For many decades prior to the war, the upper reaches of the river provided superb locations for quality fly-fishing. Based on the hard work of many citizens to sustain this habitat, this area can once again re-establish itself as a premier fly-fishing destination.

2.2.2 Evaluation of Tourism Resources

 In terms of tourism resources that satisfy the interest and curiosity of so-called "general tourist" from the international market source inclusive of the neighboring countries within the Ex-Yugoslavia (Serbia-Montenegro, Croatia and Slovenia), no listed resources identified fall into the category of world-class resource widely recognized as worth visiting for foreign visitors;

- Most of the listed resources can be classified as those ideal for a day trip or an overnight excursion for local/domestic visitors from the nearby cantons and districts: local/domestic resources recognized as worth visiting for local/domestic visitors;
- 3) In terms of outdoor activities of fishing, kayaking, etc. that aim at niche/specialist market segment, those may have potentials of attracting enthusiasts from Western Europe subject to the degree of product development effort matching the needs of western niche market (improvement in facility, service provision, training and guiding, specialty information provision, etc.); and
- 4) From the above evaluation, we may conclude that:
 - Attractive eco-tourism programs need to be developed that utilize existing tourism resources as identified in the Study Area; and
 - Tourism in the Study Area needs to incorporate specific local small-scale industries (such as agriculture, dairy, fishery, woodwork) as its integral components so that its development will help expand these cottage industries to the benefit of the communities involved.

Resources	Description
< Nature> Pliva Waterfall (Jajce)	 15 meters high scenic waterfall at the junction of the Pliva and Vrbas River
Plivsko Lakes (Jajce / Jezero)	 Around 6km length World-class sites for kayak and rowing competitions as well as scenic areas for recreational boating activities Specifically, the water is "Heavy", This means that there is a naturally occurring additional atom of hydrogen that provides extra stability to the water
Pliva River (Jajce / Jezero / Sipovo)	- The Pliva River is a mountainous river in the western part of the Sipovo Municipality at the foot of the Jastrebnjak Mountain, coming from karst sources, joining the Vrbas River on the left, in Jajce, creating at the very mouth of the river the famous Pliva waterfall (some 15 meters high). The Pliva River is some 29.5km long, with the height difference of some 114m, and total surface of 1,350km ² . The Pliva is a SEDRONOSNA river, creating SEDRONOSNE rungs in its lower part, over which it crashes in the falls, which is what makes it attractive for visitors, tourists and nature activists. Another feature of the Pliva is its zig-zag change of flow ranging from the fast mountainous through the small depths in the upper part, to the quiet down the river from Sipovo to Jezero, as well as in the part from Draganici to the bridge taking you to Brdani. There are several

Table C 2.1 Tourism Resources of Pliva Study Area

Resources	Description
	 streams of the Pliva River, of which the Janj is by far the largest, including some smaller rivers such as Perucica, Sokocnica and Libovica as its left streams. Fly fishing (Graying and Brook Trout), prior the war, the upper reaches of the river provided superb location for quality fly-fishing
Janj River (Sipovo)	 The Janj River is 14.5km long, with the height difference of some 194.5m, and the total surface of 336km². The Janj emerges at the Janj source and the Kupreska River. It runs from the south-east to the south-west and is quite a colorful river along which there are various canyons and sheer rocks, and it ends with the adorable isles at the mouth of the Janj and Pliva.
Vagan Cave (Sipovo)	- Beautiful channels, halls, and unique cave jewelry
Wild Flora (Jajce / Jezero / Sipovo)	 Study area is a significant habitat of the self-grown medicinal and edible herbs and mushrooms. Some of the important medicinal herbs found here include: Achillea millefolium, Asperula odorata, Atropa belladonna, Fragaria vesca, Gentiana lutea, Hipericum perforatum, Rhamnus fallax, Rosa canina, Rubus ideaus, Rubus fruticosus, Sambucus nigra, Thymus serpillum, Vaccinium myrtillus, Valeriana officinalis. Some of the significant edible mushrooms include: edible bolete (Boletus sp), morel (Morshella sp), chanterelle (Cantharellus cibarius) and many others. Wild forest Janj is a particular attraction in Sipovo municipality. The wild forest reserve, founded in 1954 ranges from the west peak of Stolovas (1,476m), with the total surface of 295ha. It has a separate nucleus (la IUCN category, under the protection of state, to be used exclusively for scientific purposes). The area outside the nucleus is mainly aimed at the wildlife protection (lb IUCN category). The vegetation of the Janj wild forest is mainly composed (some 95%) of climate regional trees of beech, fir and spruce (Piceo Abieti Fagetum) which appears between 1,180 and 1,470m. The sub alps beech-trees (Fagetum subalpinum dinaricum) only cover some 4% of the total surface in the south part above 1,470m above sea level. Scots pine-trees and spruce-trees (Piceo - Pinetum) are found in the north-western part of the reserve. Suhi Vrh in Jajce (1,431m) is full of coniferous and deciduous forests in which grow a various wild and medical herbs.
Wild Fauna (Jajce / Jezero / Sipovo)	 Study area is one of the richest in the country. These are habitats of the brown bear (Ursus arctos), black grouse (Tetrao urrogallus), wild boars (Sus scrofa), wolf (Canis lupus), deer (Capreolus capreolus), fox (Vulpes vulpes), pine marten (Martes martes), rabbit (Lepus europaeus) as well as lower feathered game: ducks (Anas spp) etc. Due to well-developed hydrograph, the area is also a habitat of the otter (Lutra lutra), which is a rare species in Europe, and which is a protected species in our country. Inaccessible areas are inhabited by eagles and falcons. Another curiosity and quite a rarity is the lynx (Lynx lynx), which appeared in the area only after the war was over.

Resources	Description
Fish Farm (Jezero / Sipovo)	- Trout and cold water fish
Wildlife (birds and mammals) (Jajce / Jezero / Sipovo)	 Brown bears, Wolves, and Lynx still inhabit, which unknown in other parts of Europe There are also numerous species of birds both resident and migratory habitat
< Culture / History> Old Town (Jajce)	 Jajce was a capital city of the Medieval Bosnian state and its kings, Tvrtko II Tvrtkovi, and Stjepan Toma from 1423 to 1463. There are many monuments from that period: Stari grad, Medvjed Castle, Saint Luka Church, Catacombs, temple of God Mitras and many others. In 1464, Jajce was occupied by the Turkish conquerors, that left testimony of their culture: Sahat Tower, Musafirhana as well as the Mosque of Esma Sultana built in 1753. Austria-Hungarian came to Jajce in 1878 and inherited the Turkish period. Their occupation, terror and exploitation lasted till 1918.
The Museum of the National Antifascist (Jajce)	 Jajce played a very important role in the World War II. In Sokolski dom, built in 1878, the second session of National Antifascist Liberation Council of Yugoslavia (AVNOJ) was held at which important decisions were made, including establishing of People's Federative Republic of Yugoslavia, as well as proclamation of Josip Broz Tito for Marshall (Supreme Commander of Armed Forces). Jajce was liberated on September 9, 1944. There are Many documents and monuments from this period, and the most famous are The Museum of the Second Session of National Antifascist Liberation Council of Yugoslavia (AVNOJ), First Proletarian Brigades HQ building, Villa on Varosnice that was the seat of the Earthily National Antifascist Liberation Council of BiH (ZAVNOBIH), SARENICA - Tanjug (Telegraphic Agency of New Yugoslavia), as well as the buildings Tito resided. First proletarian brigades HQ building, and Tito's residence.
Old Watermills (Jajce)	 Formerly grains grinding Picturesque setting in stream
Recent Upgrade of 4 Old Houses (Jajce)	- Swedish program
Roman Path of Salt (Sipovo)	 Partially visible even today, which went through the valley of Pliva and over Kupresko polje connecting Dalmatia with Podunavlje. A Roman inscription (60cmx60cm) was found in its proximity in Janj, in the canyon of the brook Vaganac, from which we find out that the centurion Manlije Celije from 7th legion and based on orders of Lucije Aruncije Skribonijan, emperor's governor of the region Dalmatia in the empire <i>Caligula</i> era (37 41.) was assigned to distribute land and set boundary stones between Sapuat and Emantin, Iliric tribes, that belong to a tribe union of Mezej.
Remains of Romans Construction (Sipovo)	 Remains of a Roman construction (terma) as well as large pieces of a grave-stone with carved faces and wreaths can be seen in the town park. Ancient Christian basilicas from the late antique period, sometimes from V - VI century, were found in Cifluk and Mujadzici. The first one had crypts with arched roofs decorated for sightseeing.

Resources	Description
	Close to Mujadzici church a cemetery was found with an inscription from the IV century (Sergejevski) which is the first secure ancient Christian inscription from Bosnia.
Ancient Sokograd Ruins and Tradition (Sipovo)	 The most significant monument of the middle ages in the Pliva valley is most definitely the rough town Sokol (Sokograd), whose ruins are located in Sokolac above the steep canyon of Sokocnica. Under Sokol, whose name has the same meaning as "rock of the hawk" and which reflects its steep position in the best manner. Town fell into Hungarian hands only in 1463. when the Bosnian state disappeared. While fleeing in front of Turks, last Bosnian King Stjepan Tomasevic spent a short period of time in Sokol which drew back the Turkish attack. Today, it is transformed into a ruin. Sokol represents a pleasant picnic sight from where a magnificent view to the Pliva valley can be seen.
<recreation sport=""></recreation>	
Fishing (Jajce / Jezero / Sipovo)	- Sports fishing society Sipovo takes care of Pliva and Janja water-flows long about 40km and one of its basic assignments is fish-farming. Next to Brook and Californian trout, fishermen have lipljen as well. Local fishing areas (rivers Pliva, Janj and other joining rivers) are visited by guests from abroad as well. A traditional fishermen night is organized for the "opening of the season" at the beginning of March with special programme and numerous guests.
Hunting (Sipovo)	 Hunting as sports-recreational activity has a long tradition in Sipovo. Hunting area has a surface of about 60,000 acres and it is managed by forest community "Gorica". There is a hunting society "Tetrijeb" which organises game hunting such as brown bear, big mountain cock, boar, wolf, as well as low hunt game: duck, rabbit and so on. There are 6 hunting homes that offer one of the best accommodations to hunters in BiH, and can accommodate 20 hunters. Hunting homes are located in the following places: 2 in Rodusa, 1 in Ljusa, 1 in Natpolje, 1 in Kupreska rijeka and 1 hunting home in Lisina. Traditional wolf hunt is organized every year in February where several hundred hunters from the country and abroad participate.
Mountain Climbing (Sipovo)	- Organized mountain climbing is done by a mounting climbing sport society Vitorog. The most interesting locations for hiking and mountain climbing are: mountain Vitorog and Lisina, Sokograd, source of river Janj, Blagaj cave.
Natpolje Local Ski Area (Sipovo)	- Ski-lift for local use
Others Women's Society [Viktorija 99]	- Crafts making and cultural events staging
Traditional Religious and Secular Manifestations (Sipovo)	 Celebration of orthodox churches Traditional wolf hunt, traditional clay shooting contest
Source: JICA Study Team	

Source: JICA Study Team

	Jan.	Feb.	March	April	May	June	July	Aug.	Sep.	Oct.	Nov.	Dec.
Climate	Snow		Rain		Rain & sun	Sun	Sun	Sun	Sun & rain	Rain	Rain &snow	Snow
Annual Local Events	Hunting	Traditional wolf hunt Hunting	Opening of fishing season Hunting	Hunting	Fishing	Fishing Canoe & Kayak in Lake	Fishing Canoe & Kayak in Lake Rafting	Fishing Canoe & Kayak in Lake Rafting	Fishing Canoe & Kayak in Lake Rafting	Traditional wolf hunt Traditional clay shooting contest Firewood making Fishing	Firewood making Fishing	Ramadan (2003)
Agricultural and Pastoral	Seeding (wheat, Barley, Oats)	Seeding (wheat, Barley, Oats)	Seeding (wheat, Barley, Oats Corn)	Seeding (wheat, Barley, Oats Corn Potato)		Harvesting	Harvesting	Harvesting				
Local Plants, and Flowers					Medicinal herbs Wild flowers Mushroom collection	Medicinal herbs	Medicinal herbs Cherry	Mushroom Collection Medicinal Herbs Plum	Mushroom Collection Medicinal Herbs Apple Pears Plum	Medicinal Herbs Apple Pears	Home made spirits brew from fruits	
Wild Animals and Birds					Summer migration birds							

Table C 2.2 Annual Calendar of Nature Resources for Pliva Study Area

Source: JICA Study Team

2.3 Infrastructure and Tourism Facilities

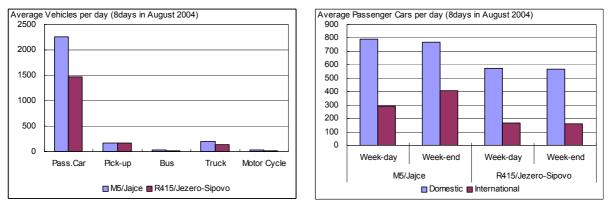
2.3.1 Existing Conditions of Infrastructure in Pliva Area

(1) Accessibility and Communications

1) Transport in Pliva Area

The National Road M5 (E661/761), which is expected to be improved as one of the core-road (the secondary road of the Pan-European Corridors), is the most important trunk road in this area passing Jajce to Jezero, where domestic and international traffic flows including passenger cars, buses, and others, as observed by the traffic count survey. The regional road R415 connecting with M5 and Kupres town through Sipovo is serving Sipovo and Jezero municipalities.

The tourist interview survey indicates that both major roads in the Pliva Area have served international car traffic (20 - 30% out of all traffic) from neighboring and EU countries, in which Bosnians living in other countries and driving to BiH were dominant. The numbers of passenger cars show different patterns between M5/Jajce and R415/Jezero-Sipovo; international week-end traffic in summer was higher than week days on M5/Jajce, while international traffic does not vary on R415/Jezero-Sipovo.



Source: JICA Study team

Note: Traffic Count Survey by 8 days (week-day 4d, week-end 4d) in August 2004

Figure C 2.1 Average Daily Traffic by Vehicles and Nationality of License Plate in August 2004

2) Accessibility to tourist attractions

• Access roads

Accessibility to existing major tourism attractions is generally good by asphalt paved roads and within a reasonable distance from the main roads (national or regional road) or each tourist town centers within 30 minutes by car. It is observed that some parts of road represented by the regional R415 deteriorated partially but they were repaired by good maintenance in applying patches, and that local access from main roads to some attractions are difficult to pass as they are unpaved. These roads need to be improved.

Destination	Major attractions	Major Road	Km	Condition	Local Road*	Km	Condition
Jajce	Waterfall, Old town, Castle from M5	M5	0.3	•	La	0.2	•
	Plivsko Lake from Town Center (TC)	M5	3	•	-	-	-
	Komotin Castle	M16	2	•	Lb	2	□ /੦
Jezero	Pliva River near TC	M5	0.2	•	-	-	-
	Pliva River recreational site from M5	R415	0.5	•	-	-	-
Sipovo	Sipovo recreation site from M5	R415	11	•	-	-	-
	Pliva River Source from M5	R415	14	•	Lc	5	□ /੦
	Janj River recreation site from TC	R415	12	•	Le	0.5	□ /੦

Table C 2.3 Access Road Conditions to Tourist Attractions in Pliva Area

Note: • = Good condition (asphalt paved), □ =Fair (paved with holes), ○ = Bad (gravel), --- = Very bad (dirt road), Local road codes* are temporal reference numbers by the JICA Study Team.

Access control in the vicinity to tourist attractions

Although tourist volumes at major tourist attractions in the Pliva Area are generally low at present, some areas such as Jajce are experiencing traffic congestion and parking problem particularly on festival days. And major attractions in the Pliva Area are often difficult for first time visitors to find due to the lack of adequate signage.

Local bus services

Several private bus companies serve local communities by inter-entity and intra-entity bus routes with several bus stops in the Pliva Area at present. Main service route is between Sarajevo and Banja Luka route tracking the national road of M5 (E661/761) through Jajce bus station and Jezero bus stop. Frequency of bus services is from two times to over ten times per day. It is observed in the study team's interviews that local people have not

faced critical problem in terms of bus services except remote areas because of having their own vehicles or ride-sharing including students commuting to schools at present.

Destination	Inter-Entity Service	Intra-Entity Service
Jajce /Jezero (intersection)	Banja Luka, Bosanski Novi, Bosanska Gradiska, Brcko	Jajce - Towns in FBiH (e.g. Zenica, D.Vakuf, Bugojno, Sarajevo, Mostar)
Sipovo	Jajce (8 times/day)	Banja Luka (2 times/day) Other Srpska towns

Table C 2.4 Local Bus Services in Pliva Area

Source: JICA study team based on data from the Governments

3) Telecommunication in the Pliva Area

Almost all of Pliva Area is covered by fixed line and mobile network systems in general. However, Jezero and Sipovo contain some underserved areas of mobile network where users cannot connect by inter-entity communication, and there are many areas where users cannot use mobile phone in rural areas.

Table C 2.5 Mobile Telephone Coverage Area by Three Telephone Companies

	Telephone Land	Post	Telephone Company			
Pliva Area	Lines	Telecommunication Main Office	BH Telekom	HTP Mostar/	Telekom Srpske	
Jajce	NA	FOJNICA (BHT/HTP)	□ (town)	□ (70%*)	•	
Jezero	368 lines	/ KRESBO (HTP)		□ (50%*)	□ (40%*)	
Sipovo	NA	/ VITEZ (HTP)	∘ (town)		□ (80%*)	

Note: • = fully covered, \Box = partially covered, \circ = limited area only covered, --- = not covered Figure of percentage of coverage area is based on the rough estimation of coverage maps.

(2) Utility Conditions

1) Water use and water supply

Water supply in Pliva Area is in good condition at present because of abundant water of Pliva River nourished by mountains with rich forest. Every urban area in the Pliva Area are served by municipal potable water supply system, however some remote rural areas have not been covered by the municipal service where villages have to prepare own water supply system and would have some problems in summer season due to shortage of source water.

2) Inadequate sewerage treatment and solid waste disposal system

In the Pliva Area, every municipality faces the same issue of how to manage wastewater and solid waste. Some inhabitants have used septic tank system although it is not always

adequate, and visitors often encounter illegal dumping of garbage on major roads or along Pliva and Vrbas Rivers. This is caused by the lack of sufficient finance for disposal management, insufficient capacity of dumping sites, and poor awareness of local communities in every municipality in spite of many efforts of environmental awareness programs by municipalities in cooperation with JKP and NGO involving school students.

Pliva Area	Type of Source	Existing Wat	Underserved Area	
Municipality	Municipality Type of Source		Coverage Household*	Underserved Area
Jajce	Pliva River	135	3,000	16 communities
Jezero	Pliva River	50	240	150 HH/ 600pop
Sipovo	Pliva & Janj River	NA	1,500	NA

Source: JICA study team based on data from each municipality and JKP Note: Coverage household is within urban area.

Table C 2.7 Sewerage System C	Conditions in Pliva Area
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Pliva Area Municipality	Urban Zone Collective System	Rural Communities	Reference
Jajce	Yes (no treatment)	Direct discharge	
Jezero	No (15HH septic)	into surface water	Collection 3 times/year
Sipovo	Yes (no treatment)	or underground	

Source: JICA study team based on data from each municipality and JKP

Pliva Area	Existing Dispose	Official Dumping Site		
Municipality	No. of Collection Vehicle	Collection Points	Onicial Duriping Sile	
Jajce	2 (4)	2,997	1	
Jezero	0 (1)	0	0	
Sipovo	1 (2)	50	NA	

Source: JICA study team based on data from each municipality and JKP

2.3.2 Existing Conditions of Tourism Facilities for Pliva Area

(1) Accommodation

Major accommodation facilities concentrate in Jajce in the Pliva Area, as Jajce has attracted tourists as a historical heritage destination. Plivsko Lake offers a summer recreation area, where an auto-camping area used to attract many international camping cars before the war, but now it is closed and waiting for investment.

It was revealed in the study team's interviews that tourists who stayed at Motel Plivsko Jezero located in front of Plivsko Lake were mostly week-enders with 2-3 nights stay as an average and 90% of total visitors from countries of former-Yugoslavia and repeaters. Jezero does not have any registered accommodation facility. In Sipovo, some facilities were abandoned or closed, to which investors are sought under the privatization schemes. There are some hunters from Italy who stay at private houses or the motel in Sipovo.

Facilities and equipment of those accommodations satisfy basic requirements in general. However, maintenance in old hotels is not sufficient and hospitality services are inadequate. Floor areas of rooms of accommodation in the Pliva Area are comparatively small and room rates are not less than those in others countries.

Category	Jaj	Jajce		Jezero		Sipovo		Total	
Calegoly	Facility	Room	Facility	Room	Facility	Room	Facility	Room	
Hotel	2	68	0	0	(1)	(38)*	2	68	
Motel	1	28	0	0	1	20	2	48	
Pension	0	0	0	0	0	0	0	0	
Lodge	0	0	0	0	0	0	0	0	
Guesthouse	0	0	0	0	0	0	0	0	
Others	0	0	0	0	0	0	0	0	
Total	3	96	0	0	1	20	4	116	

 Table C 2.9 Number of Registered Accommodation in Pliva Area in 2004

Source: Tourists Community of FBiH and Central Bosnia Canton

Note: Hotel Janj in Sipovo is closed at present that is waiting for privatization.

(2) Recreational Facilities and Others

The Pliva Area does not have enough attractive recreational facilities for international tourists to take advantage of abundant nature attractions at present. The majority is used for local communities needs. One of distinct recreational facilities is boats in the Plivsko Lake, where international boat races used to be held before and hunting lodges in the mountains to accommodate international and domestic hunters. There are a few ski fields in the southern area of Jajce municipality, where it attracted domestic tourists before the war, but lost its role at present.

Commercial facilities and cultural facilities also concentrate in Jajce town as the historical heritage center of the Pliva Area. The museum of AVNOJ was a famous memorial destination for the former-Yugoslavia history, however it was abandoned.

Catagony	Category		Pliva Area			
Category	Category	JC	JZ	SP	Total	
Food &	Restaurant	14	3	5	22	
Beverage	Coffee Shop		7	38	52	
	Bar/ Pub / Discotheque	1	-	-	1	
Recreational	Public Park	-	-	1	1	
Facilities	Sports Gymnasium	2	-	-	2	
	Barbecue site with facilities	30	-	1	31	
	Athletic ground / track field	1s	1s	1s	3	
Water Sport	Jetty or pier for boat	4	-	-	4	
Facilities	Boat house	2	-	-	2	
	Recreational boats	5	-	-	5	
Mountain /	Mountain lodge (hunting lodge)	3	1	6	10	
Nature	Ski field only	2	1	-	3	
Recreational	Ski field with lift	-	-	-	-	
	Camping site / Auto-camping	(3)	1	-	1	
	Nature trail	1	-	-	1	
	Spa / Hot spring bathing facilities	2	-	-	2	
Cultural	Museum (anthropology, history, etc)	3	-	-	3	
Facilities	Theater, Cultural Hall	1	-	-	1	
	Other facilities	(3*)	1**	1***	2	

Source: Tourists Community of FBiH, JICA study team

Note: JC=Jajce, JZ=Jezero, SP=Sipovo, 1s = school facility, (3*)= exhibition place but not used, 1** = traditional house, 1***= Cinema

2.3.3 Issues of Infrastructure and Tourism Facilities for Pliva Area

The following issues of infrastructure and tourism facilities for the Pliva Area need to be addressed in order to introduce eco-tourism products into the area.

- 1) Access improvement and adequate control in eco-tourism attraction areas
 - A few local roads need to be improved by adequate pavement from trunk roads to attraction areas (e.g. Pliva fountain area and Janj River recreation area);
 - Parking area provision at suitable locations avoiding deterioration of natural and historical environment such as Jajce historical town or Pliva River side areas;
 - Traffic sign system is required to guide visitors efficiently to attractions in the Pliva Area on M5 and R415 as the trunk roads; and

Consideration should be given to alternative transportation means from parking area to connect with attractions such as walkway, shuttle service, horse carriage, bicycle and other system taking into account of conservation of environment in natural heritage areas along the Pliva River and historical heritages of Jajce town.

- 2) Improving utility systems for sustainable eco-tourism of river environment
 - Improve existing sewer system (direct discharge to rivers) by adequate measures in urban areas in the Pliva Area;
 - Improve individual sewer system of farmers and tourist facilities including country lodging in rural areas by adequate measures (e.g. septic tank, composting toilet system, etc);
 - Improve and enforce existing solid waste disposal system (direct dumping sites into mountains and rivers, shortage of collection vehicles and insufficient collection points, etc) by adequate method and facilities; and
 - Enhance local communities' awareness on environmental cleaning for river basin.
- 3) Encourage accommodation business by local communities
 - Encourage entrepreneurs for the development of country lodging and other small-scale accommodation (pension, guesthouse, etc) in Sipovo and Jezero;
 - Expand small-scale accommodation capacity in order to meet future tourist increase following the model of the expansion of motels and pensions in Jajce town area that takes into account designs harmonious with historical urban townscape;
 - Encourage skills and knowledge of hospitality business for local communities; and
 - Improve and encourage adequate facilities standards enabling for local business to apply toward EU standards (e.g. eco-label).
- 4) Improving tourist facilities to meet international and domestic tourists for eco-tourism
 - Formulate a nature and culture trail system in order to access natural and historical heritages areas utilizing existing walkway, trail or pass networks focusing on the Pliva Area, surrounding mountains and Jajce historic town;
 - Develop or upgrade river / lake sports facilities to meet international facilities standards with operational capacity building (guide, security, interpretation), taking account of facilities standards to avoid environmental deterioration in nature area (river, lake and mountain forest);
 - Introduce sufficient interpretation facilities and guide systems for cultural historical heritage (visitor center, site museum, sign and information, tour guide, etc) and nature attractions such as nature trail and garden; and
 - Introduce adequate maintenance for sustainable facilities operation including material choice, design, and funding.

2.4 SWOT Analysis for the Pliva Area

The following table summarizes the key points made in this section. This section states the strengths, weaknesses, opportunities and threats that the Pliva Area has in connection with the three types of tourism for which it can compete, cultural, family and nature-based tourism. The area has major strengths for these types of tourism and must take advantage of the related opportunities. All the aspects from the general SWOT appearing above are very relevant here, but are not repeated.

(1) Cultural Tourism

The area offers heritage assets that are visually commanding and at the same time have strong symbolic value for the population, the waterfalls, the town's walls and castle, the old watermills at the edge of the lake, and the Plivsko Lake itself. The area's first strength is a broad one appealing to all types of cultural visitors, namely the uniqueness of Jajce's natural and man-made environment and history, combining great visual appeal with strong intellectual and symbolic meaning for both domestic and foreign visitors. The region's weaknesses relate directly to the weak portrayal of information to the public to give profound meaning to these heritage and natural assets. The lack of interpretation refers mainly to the absence of signage, of guidebooks and of trained guides, while the lack of events highlights the limited use of living culture in the form of commemorations, festivals and carnivals. A third weakness cites the unsightly air pollution frequently created by the Elektrobosna factory on perhaps most days of the year, both day and even at night. These clouds are often visible form several km distance and directly detract from the message of environmental excellence that this Master Plan is intended to convey.

The opportunities relate mainly to different, well-suited types of tourism that the study area can attract. Strong interpretation is required to fully tap this potential. These opportunities relate directly to distinct visitor segments, namely to school groups [educational segment], to weekend or short trips for families from nearby cities [regional segment] and to European vacationers stopping on trips to and from the Dalmatian coast [rest stops for the summer vacation segment]. One threat is that the tour operators will choose not to schedule overnights for their tour groups at Jajce for lack of sufficient interest and entertainment to justify an overnight. Finally an additional threat is little or no solution for the air pollution problem of the factory. This is a blight substantially cutting the appeal of Jajce town.

(2) Family Tourism

The Plivsko Lake has greater importance for family tourism than for cultural tourism so it is considered as a major asset for this segment, along with the riverside park areas of Jajce town. The relevant strengths are summarized as excellent scenery, very accessible parklands and easy sports and relaxation activities for people of all ages. The key weakness is the limited choice of easy sports and relaxation activities in the riverside park of Jajce and particularly along the lakeshore areas where one will wish to have a full range of relaxation options on land and on the water, for young and old people alike to justify a stay in the area of half a day or more. The great scenery is there, fine road accessibility also, and spaciousness of much of the shaded lakeshore acreage. However, the dominant weakness is that the facilities are not there making possible many leisure and recreational activities. Moreover, the trash in the river and lake is an eyesore. Finally, the Elektrobosna air pollution is also a deterrent in the town.

Hence the opportunities focus on providing visiting families and young people with more choices for amusements, entertainment, light sports and recreations, and also for overnight lodging. A related opportunity is the custom of perhaps most Diaspora Bosnians living in Europe to drive back to BiH regularly to visit family and friends. With their relatively higher incomes they can bring family and friends with them to BiH, and while in the country include visits to the scenic and fun Pliva Area regardless of the sports preferences of their guests. The opportunity for the Pliva Area is that of a family heritage showcase for the nation. The key threat for this type of tourism is twofold, the first being little public action to improve the infrastructure along the lakeshore and river parks to handle more people adequately. Poor public management of the lake may block needed private sector investment in the range of family amusements that will liven up these areas for weekend and holiday visitors. Also of note are two environmental threats already cited, the air pollution blight from the ElektroBosna factory, and that of an unresolved trash and debris situation on the surface of the lake marring its striking beauty.

(3) Nature-based Tourism

This type of tourism relates mainly to sports-related visitors and to wildlife seekers for hunting, photo safari or just viewing. Strengths relate to the area's terrain, flora and fauna making it highly suitable for specific sports like fly-fishing, canoeing and kayaking. Another valuable strength is the detailed specialist knowledge of the members of the various sports associations and clubs enabling many to provide skilled guides and monitors to enrich the

enjoyment of visitors. Another is the area's fame in the region as a sports haven. A final one is the memory of thriving pre-war tourism, which should give the current generation the will to support a revival of the tourist industry. Weaknesses relate to the unfamiliarity of the clubs with international safety and quality standards in wide use in many countries and indispensable for many sportsmen. A further weakness is lack of familiarity of the club members with the reliable and safe operation of sports services as commercially run businesses that can market themselves to target customer groups. A final weakness is the presence of mined areas in some of the mountain areas which is a crippling safety and image problem.

Strong opportunities relate to established sports like fly - fishing and canoeing & kayaking where the Pliva Area offers highly competitive conditions enabling a rapid penetration of the market over the next few years. The main threat is a twofold one that includes the inability of the clubs to develop a new business culture and manage the sports more professionally, in line with widely adopted safety and operating standards. It also includes the failure of the sports clubs to close the gap between themselves and the travel industry that must sell the sports packages in the marketplace. These are weaknesses of organization and management that need to be directly and sustainably addressed, but the travel trade itself does not have control over these clubs.

	Cultural Tourism	Family Tourism	Nature-based Tourism
Strengths	 Jajce's unique story mixing natural beauty with medieval & 20th century history of strong appeal to international tourism Architecture of the atmospheric old town with solemn stone towers & high walls Picturesque watermills celebrated in history, the arts Memories of thriving pre-war tourism generating community benefits 	 Dramatic scenery of town overlooking waterfalls ideal for strolling Riverside parklands for leisure, picnicking, wedding parties, celebrations Scenic lake for easy sports activities strolling, boating & light sports [biking, hiking, etc] 	 Exceptional range of assets with high sports value: rivers, lakes, caves, trails, wild animals, herbs & mushrooms, fish species Detailed specialty knowledge of members of local sports clubs, unions Former regional fame for hunting, canoe/kayak including international competitions Legacy of thriving pre-war nature tourism
Weaknesses	 Lack of interpretation-trained guides, any information on area's history Few/no events to give meaning & life to town's features Unsightly Elektrobosnia air pollution at times stagnating over the valley, emitting reddish smoke 	 Lack of leisure facilities along the lake like playgrounds, promenades, bike paths, picnic tables Unsightly trash and debris floating along the lake's shores Unsightly Elektrobosnia air pollution at times stagnating over the valley, emitting reddish smoke 	 Unfamiliarity of sports associations and of the broader community with international safety & quality standards Unfamiliarity of same with operation of nature-based activities as businesses Negative image of minefields in mountain areas
Opportunities	 Favorite school trip destination to see nation's history & old architecture Popular weekend escape destination offering culture & scenery for visitors from Sarajevo, Zagreb Favorite overnight stop for Dalmatian coast motoring tourists in summer 	 Capture European auto tourists for overnight stops in summer season with more lodging options like rental rooms and campgrounds Win young visitors & families with more amusements, fun activities for more of a lively, historic town Promote Bosnian Diaspora investment to expand offer of services and foreign promotion 	 Strong destination in Balkan region for fly-fishing, canoe/kayaking fans including hi-income European sportsmen and international competitions Good destination for mountain enthusiasts like hikers & hunters, cave explorers, wildlife viewers Good destination for school & youth teams needing training on the river or for scouts & all nature-based youth groups
Threats	 Elektrobosna refusal to resolve air pollution problem Refusal of mainstream tour operators to include overnight stops at Jajce for tour groups 	 Municipal inertia to add leisure infrastructure along the lake to enliven the atmosphere, to add activity choices and increase leisure spending options Community ineptness to face trash & debris problem in sustainable manner for lasting improvement 	 Refusal of sports associations to unite & reform to modernize the lead sports of fly-fishing, canoe/ kayaking for top quality product & full user safety Failure of associations to secure partnerships with tour operators motivated to sell Pliva River sports packages

Table C 2.11 SWOT Analysis of the Pliva Study Area

Chapter C 3. Agriculture Analysis of Pliva

3.1 Introduction

3.1.1 Use of Land

Table C 3.1 shows the current landuse of the Pliva Study Area.

Table C 3.1 Current Landuse of the Three Municipalities in Pliva
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					Unit: ha
Surface	Jajce	Jezero	Sipovo	Total	%
Arable Land	5,887	665	6,438	12,990	14
Meadows & Pastures	5,213	604	4,965	10,782	11
Permanent Crops	277	78	165	520	1
Others	1,826	545	1,066	3,437	4
Forest & Semi Natural Areas	20,709	4,404	41,415	66,528	70
Urban	198	30	233	461	0
Water Surface	190	0	0	190	0
Total	34,300	6,326	54,282	94,908	100

Source: CORINE and THE INSTITUTE FOR URBSNISM in Banja Luka

Often figures are based on statistical data and estimations. The objective was to provide a realistic picture as a basis for further strategy development.

Altitude	400 - 470 m
Annual rainfall	930 - 970 mm
Average temperature	9.4 - 9.9°C

3.2 Plant Production

Grain, maize, soya and sunflower can be produced commercially just on big farms like former cooperatives. Agro-inputs like seed and fertilizer are more expensive than in neighboring countries but if land could be rented almost for free than there must be some farming opportunities. Sugar beets are not produced any longer as the sugar factory stopped their production long ago.

In the past cereal crops accounted for half of the total area cultivated. Maize grown for livestock feed is the most important, followed by wheat. Average yields are still very low by

western European standards. In mountainous areas agro-climatic conditions limited both actual and potential yields. Even if the profitability of wheat production is low, farmers choose to produce wheat rather than more profitable crops in order to be food self-sufficient.

Due to the statistical data from THE INSTITUTE FOR URBANISM in Banja Luka around 500ha are used for cereals production; that would mean that less than 5% of arable land is used for cereals only. In the ranking of their importance the relevant cereals are maize (average yield per ha 2.5 to), wheat (2.8 to), barley (2.5 to) and oats (2.0 to). Equivalent figures for Austria are maize (average yield per ha 9.9 to), wheat (5.0 to), barley (spring barley 3.9 to) and oats (3.6 to).

Maize and oats are usually used as fodder for their own animals. As plots are small and families are big most of the cereals are used for consumption on the farm and just limited surplus production reaches the market.

Vegetables are an important component of the production system in BiH, accounting for approximately 20% of the total area cultivated. Potatoes grown in the hilly-mountainous areas are the very important crop beside maize and wheat. Other vegetable crops are grown in the lowland areas close to urban markets and/or processors, with beans, cabbage, onions, tomatoes and green pepper most prominent. Yields are very low by western European standards, particularly for potatoes.

General conditions favor vegetable production, especially in those lowland areas where the land / labor ratio is very high. Varied agro-climatic conditions and the potential for low-cost irrigation allow production of a wide range of crops. Rural labor is abundant, wage rates are low (also as nobody is legally registered) and there is a strong domestic demand for local produce. The relatively low demand for working capital, ready cash income and the limited need for farm machinery also make vegetable production well suited to those farmers who are trying to re-establish after the war. Post-war recovery has thus been strong, except for potato production that is constrained by a shortage of improved seed. Further growth in production will require a significant increase in competitiveness, based on higher yields and efficiency and the introduction of improved varieties.

Table C 3.2 shows the relevant chart showing the most important vegetables in Pliva Area. Distribution means ranking of importance. Also figures can be seen that reflect the average yield harvested in the Pliva Area. Beside we find the average figures for the same varieties in

Austria. A conclusion must be that there is a huge potential for increasing the harvested amount just by intensifying the production; for example in neighboring Austria average yields for potatoes are five times higher than in Pliva Area. These vegetables are produced on small plots primarily for home consumption and winter storage.

Variety	Distribution	Pliva	Austria Harvest (ton/ha)	
vallety	(%)	Harvest (ton/ha)		
Potatoes	42	6.0	30.0	
Field beans	21	1.5	2.6	
Cabbage and kale	13	20.0	58.0	
Onion	4	10.0	47.0	
Carrot	2	6.5	54.0	
Garlic	2	8.0		
Field peas	2	2	2.3	
Tomato	2	6	177	
Fresh pepper	2	7	54	
Cucumber	2	7	77	
Other vegetables	8	1		

Table C 3.2 Important Vegetables in Pliva and their Yield (ton/ha)

Orchards have a long tradition in BiH and in the area the following fruits are cultivated: plums, apples, pears, cherries, sour cherries, apricots, nuts (in shell) and strawberries. Again fruits are grown for self-consumption and not for commercialization. Usually they are processed towards jams, fruit juices, and compote and for the winter stores. Significant amount of fruits and especially plums are used for the production of traditional fruit brandies such as "sljivovica".

In a pre-war statistic the self-sufficiency rate for plums was 467%. It must be remarked that all existing orchards are rather old and not well maintained.

Berry fruit production should be more considered as it generates high returns, has a high demand for seasonal labor, creating rural employment, and is export-oriented. Farm investment requirements are moderate and returns begin in the first year of investment. The production of berries - strawberries, raspberries, and blackberries - fits well for many parts of BiH as they can be grown on rather small plots and are labor intensive.

Processed and semi-processed berries and fruits have been an important export article in the past but due to the war the buyers in Western Europe went to Poland and other countries. Companies like Vegafruit and Vitaminka would like to recover this lost market but competition form Eastern Europe is fierce. Cold storage facilities are available all over the country.

3.3 Livestock Production

Livestock	Jajce	Jezero	Sipovo	Total
Cattle	1,800	225	3,300	5,325
Sheep	3,840	600	2,500	6,940
Goats	1,005	20	600	1,625
Pigs	723	20	200	943
Horses	286	29	290	605
Chicken	9,000	1,200	12,000	22,200

Table C 3.3 Livestock Population of the Three Municipalities in Pliva Area

In BiH as well as in the study areas small-farm cattle production is characterized by small herds and seasonal milk supply. 60% of the average livestock farmers own just one cow and herds with more five cows are very seldom. Most cows are a mix of the local Busha breed with Grey Tyrol, Brown Swiss or Simmental. Performance is often much below 10 liters per day due to poor nutrition (including insufficient supply of fresh water), especially during the winter, late weaning of calves and slow rates of genetic improvement (only 32% of farmers use artificial insemination). Nevertheless, gross-margin analysis indicates that small-farm cattle production is profitable and the milk income improves household cash flow. (FAO Mid Term Strategy, 1999) Already in this FAO study it was recommended that governmental support measures should be directed only to those farmers who have larger herds and a commercial orientation.

A large part of the land in BiH is of medium quality in mountainous areas with usage limited to livestock grazing. As wheat and other industrial crops as well as ready-made concentrated fodder mixtures for bull fattening are too expensive the only opportunity is an extensive production of ruminants for meat and milk. As there is an underdeveloped market and just few butchers and slaughterhouses the demand side for cattle is very volatile. Also due to this insecurity farmers are facing often economic problems.

Farmer get around 4KM per kg of living veal; 10KM for cheese with high fat content, 12KM for milk cream and around 0.5KM for 1 liter of milk.

Before the war the milk market was about 850 million liter of milk/year were produced in BiH (average annual yield of 2,400 liter of milk/cow). About 280 million liter/year was delivered to dairies, while the rest was individually consumed, either as milk or processed into other dairy products; mainly cheese & yogurt and some butter. During the war huge losses in livestock significantly decreased milk production, though after the war donations of cows (despite their lack of coordination and their recipients' lack of proper training and care) meant that the dairy industry was significantly supported in its re-establishment.

Raw-milk input now comes from 6 large state-owned farms with an average of 600 milk-cows (Holstein) each, plus 9 smaller state-owned farms with an average of 250 milk-cows each. It is claimed that all these cows yield about 7,000 liter of milk/year each. However, there is considerable doubt about this figure and Butmir milk farm has less than half this figure. There are also about 83,000 household-farms, which produce about 80% of the current total production. These small household farms typically have only up to 2 milk-cows each with performance as low as of 2,160 liter of milk / year / cow, due to poor nutrition and unqualified breed.

The milk production picture is completed by the existence of between 1,000 to 3,000 medium private farms with 5-10 milk-cows (also poorly fed and performing) and of a small number of large private farms, where cows are adequately fed and have high yields of about 7,000 liter of milk /cow /year, and which produce the remaining 10% of the total milk production in BiH.

The pre-war average consumption of milk and dairy products in BiH was equivalent to 193 liter of milk /capita /year. In the FAO Agricultural Sector reports it is believed to have been reduced to as low as 130 liter /cap /year after the war due to the decrease of the average consumer's purchasing power and the dramatic decline in animal numbers. After-war local dairy production continued to be hindered by: poor availability and hygiene-safety of local products, coupled with the abundant availability of cheaper and safer imported milk and dairy products.

For 2001 the total farm production of milk was estimated of 400 million liter of which about 41 million liter have been delivered to state-owned dairies (incoming mainly from state-owned farms, as individual milk producers avoid delivery to state-owned farms due to their delayed

payments), and 30 - 35 million liter of milk shall have been delivered to private dairies. There are about 30 dairy complexes with a total installed capacity of 200 million liter of milk / year. Six of them are still state-owned. The rest include 4 large private dairies and 22 smaller, all of them with modern and fairly recently installed equipment. During year 2000, all dairies processed about 36.5 million liter of milk. Meggle in Bihac is doing extremely well and increase its daily processed raw milk from 50,000 liters a day in 2003 to 80,000 liter in 2004, having peak days with up to 95,000 liters a day. Also the Slovenian owned dairy plant in Tuzla is catching up.

The total cost of production and collection of locally produced milk is estimated to be 0.60KM/liter (0.45KM/liter + 0.15KM/liter). Until 1st May 2004 the dairies in BiH could have Slovakian milk delivered to them in cryogenic tanks on trucks C + F, at 0.4KM /liter. The same with milk from Slovenia and Hungary. As there exports have been subsidized with up to 30% the new membership in the EU stopped these exports immediately and now the milk industry in BiH has some short time to recover.

Actually private dairies operate at 40% of their capacity and complain about the bad conditions of the National Road Network, the scarcity and high cost of using proper vehicles for milk collection/delivery (0.133KM/km/t) and the unreasonably high cost in electricity used by industries and enterprises (double the cost of household use) which limits their ability to invest and operate cooling storage installations. Thus there is a weakness to reach remote milk-producers and collect more milk daily, for higher use of their installed capacity and a difficulty to achieve scale economies and lower unit production cost. However, 3 out of 4 large private dairies are able and actually do produce UHT milk in Tetrapak packaging (cost 0.3KM/liter), and in low fat content (1.5% or 3.2%) form. Actually 30% of their total fluid milk collection is in UHT products, and another 30% is in common pasteurized form, in white PET bags or bottles (cost 0.18KM/liter) or in Tetrapak or in Glass bottles (cost 0.27KM/liter or 0.3KM/0.72 liter bottle). Also 30% of the milk collected is turned into yogurt or sour-cream (at a 1 liter : 1kg conversion factor) and 10% of the milk collected is turned into soft-white cheese (Kaimak type at a 5 liter : 1Kg conversion factor; milk specific weight is about 1,032). There are only two other famous brand names of cheese produced in BiH, namely TRAPPIST and TRAVNIK. Small private dairies and most of the state-owned are currently producing only pasteurized milk in PET bags. As there is no glass producing industry in BiH, as well as no packaging materials factory, dairies were forced to produce their own packaging and labels by importing the necessary raw materials. Retail prices for UHT-3.2% fat - milk range from 1.05KM /liter in RS to 1.13KM/liter in FBiH; similarly creamy cheese is priced at 10KM/kg in RS and 6.8KM/kg in FBiH, while yogurt is found at 0.45KM/0.2 liter in RS and at 0.32KM/0.2 liter in FBH. (June 2001- GTZ report).

Foreign imported similar products are more expensive, yet they are better positioned in the local market, being considered of better quality, packaging and labeling attractiveness, hygiene safety and cover an additional market demand for dairy products (mainly various types of cheese) equivalent to about 200 million liter of milk /year, which the local dairy industry is unable to satisfy. Most imported gods come from Germany, Hungary, Slovakia, Croatia (mainly the Dukat branded products), Slovenia, etc. (EU member states get export-subsidies if they add some edible fat towards fruit yogurts!)

Local private dairies declare a net profit margin (before taxes) of about 23% and need low interest credit lines to realize their strategic plans for expansion. There is at least on of them (MLIJEKOPRODUCT in Dubica, RS) with total installed capacity of 73 million liter of milk /year and a 2000 yearly total sales of 18.5 million KM, that has a 4 million KM investment plan to create its own private milk-producing farm with 600 black/white Holstein cows in an available nearby area, capable to produce 4.8 million liter of milk /year.

- Current Total Market Value is estimated as: 760 million KM/year
- Current Total Market Potential Value is estimated as: 850 million KM/year
 (Source: Phase I Agribusiness Report, Sector Strategy and Enterprise Screening)

In Jajce there is no diary plant, but the purchase of milk is organized by milk industry MEGGLE in Bihac. The purchase of milk and the network of purchasing stations are well organized and cover the areas of municipality where the livestock fund is more numerous and of higher quality. Locations of the purchasing stations with lacto-freezers are Vinac, Kruscica, Sibnenica, Divicani, Bravnice, Cusine, Gornji and Bespelj.

Jezero is also linked to MEGGLE with one lacto-freezer in Jezero town; Jajce and Jezero are on the main road towards Bihac, the dairy plants headquarter. MEGGLE is also active with milk stations in Dragici, Gornji Volari and Besrjevo.

Sipovo has a small dairy plant "Sipovo" that is owned by Mr. Pero MILJEVIC and Mr.Zoran GLUVIC. The plant processes about 5-6,000 liters of milk daily. The milk collection is organized in the municipalities Sipovo and Mrkonjic grad. The dairy's product range covers consumption milk, yogurt, cheese, cheese for pie and sour cream. Locations of the collecting

stations with lacto-freezers are Muzici, Sipovo milk, Sipovo Serici, Strojice, Dabici, Natpolje, Dragici, Olici, and Dragnic.

A great number of farmers and rural households consume milk for their own needs and for produce cheese, kajmak and skimmed cream.

The local "Pramenka" sheep breed accounts for 80% of the sheep flock, supplemented by Pramenka-Merino crossbreeds and the small Humnjacka sheep of southern Herzegovina. 95% of production takes place on small, private farms and low-input management systems predominate. Sheep farmers have usually flocks of less than 20 sheep. Sheep production has long been falling in BiH. Total sheep numbers fell from 4.0 million in 1939 to 1.3 million in 1990. 1996/1997 there has been as less as 550,000 sheep but since that time flocks are growing again. Sheep are kept in the marginal hill and mountain areas that were the traditional domain of sheep production. These areas were steadily abandoned in the past but due to lack of other opportunities people are getting more interested in keeping sheep, especially as in the above mentioned marginal hill and mountain areas there are not many alternatives.

Most income is derived from meat (80%) and high-quality cheese (15%), for which there is a strong demand on local markets and long-term export potential. The coarse Pramenka wool is typically heavily cotted due to poor animal nutrition especially in wintertime and consequently is of little value. As profitability is low (also due to imports), sheep production is unlikely to recover to even pre-war levels unless performance and returns improve significantly. This will only require major changes in production systems and better marketing of meat, cheese and wool.

The price for lambs and young sheep is stable and with around 5KM /kg live weight rather high. For wool there uis hardly any commercial letout in BiH; sometimes barter trade is taking place, exchanging raw wool for wollen gloves, etc.

Sheep milk could be an interesting product but requires dairy plants that are specialized on sheep milk. A big milk sheep farmer in a remote area explained that it is hard to find Shepard who are willing to milk the sheep twice a day - a pre-requisite for successful sheep milk farming.

Sheep farms with more than 200 sheep are located in Djurtovina, Dogani, Sibenica, Bulici, Lendici, Ladani, Livicani, Bistrica, Veliko do, Barevo and Donji Bespelj. Ivan Bagaric is a typical example of an ambitious farmer having his farm quite high above Jajce; for the time being his flock counts 100 sheep but he is going to take a credit and increase the number to 200 sheep soon.

Goat production was traditionally practiced by poorer farm households, which grazed small flocks (15-50 animals) on unused land. The pre-war population is estimated at 40,000 head, most of which were in Herzegovina. These were typically a cross between the domestic Balkan goat and milking Saanens and were used for milk and meat production. The post-war population of 30,000 goats has been the focus of renewed interest as these animals thrive in more marginal areas and have lower capital requirements. In Cuklic near Sipovo there is a goat farms with 120 heads of Alpine goats.

The big disadvantage of goats is that they are eating almost everything and they could easily completely damage the flora if over-grazing takes place. This happens if not enough grazing area is available and flocks are not guarded well.

Meat and wool face similar problems like sheep. Hard goat cheese would be a delicatessen if export would be possible.

Among the small-scale farmers in BiH, some 50,000 households owned pigs typically with two sows producing 10-15 weavers /sow /year. Due to religious eating patterns pigs are found at farms of Serbs and Croats. The big state owned pig farms disappeared after the war.

Most small farms have poultry but egg production is as low as 50-60 eggs/hen and year. Commercial poultry production for broiler and eggs has grown quickly in response to strong local demand and numbers (over 2.8 Million in 1998) already exceed pre-war levels. Poultry will dominate non-ruminant livestock production in the future but further growth will depend on the price and availability of animal feed, most of which is imported. Therefore poultry production is capital intensive.

3.4 Fishery

The pre-war resource base for fish production in BiH comprised 20,000km of rivers and streams, 18,200ha of reservoirs, 400ha of natural lakes and 18km of coastline on the Adriatic Sea. There are 160 fresh-water species, of which 10% are harvested. The fresh-water catch of 4,620 tones, 76% of which came from state enterprises, was sufficient to meet 39% of domestic consumption of 2.6 kg/capita.

In RS, most output came from four ponds covering an area of 2,700ha, which produced 1,200-1,500 kg of carp per year. Regarding job creation it has to be mentioned that fish farms do not create many new jobs and furthermore it is a very capital-intensive business. Fish fodder is usually imported from Italy or Austria.

The environment with fast flowing water is very favorable for fish production. Therefore we could find 15 fish farms in Pliva Area. Autochthon fishes are trout and graylings in Pliva Area and main activity is trout production.

There is just one hatchery in Jezero, the fish farm "Ribogojiliste Jezero". This big facility is owned by ZDP "Hidroelektrane na Vrbas" Mrkonjic grad and managed poorly. Production capacity is huge but actual output low.

For the time being there are no processing facilities in the area.

3.5 Forestry

Pliva Area is located between 400 and 1,200m above sea level and characterized largely by forests as the area covered by forests is between 60 and 80% of the total land size. We could find two categories of forests; pure conifers with spruce only and mixed forest with spruce, fir and beech. Illegal logging is a problem all over the country; it is not more severe that somewhere else, maybe with the exception of the inter entity borderline, that attracts everywhere increased illegal traffic.

Collecting non-timber forest products like wild herbs, medical plants, wild berries and mushrooms have been propagated by many projects and most of the time with good results. Collecting plants does not even require small plots and could be done during a long time over the year.

Partners for Development (pfd) have been organized herb collection close to study area Pliva; to be precise in Bugognje, Donji Vakuf and Jajce and pfd still has the intention to collect also in Jezero and Sipovo. The herb processing activities in BiH are not well analyzed and most probably most products leave the country as bulk commodity and without further value-added. The herb collecting farm members or their organization should get direct contact to the buyer abroad to deepen their business relations. Just to deliver commodities is risky and not sustainable.

3.6 **Processing Industry of Agricultural Products**

Pliva Area already has the following agro-processors:

- Wood industry, sawmills Jajce/Sipovo;
- Dairy plant Sipovo;
- Slaughterhouses and butcher shops Jajce/Sipovo;
- Mills Jajce/Sipovo;
- Bakeries Jajce/Sipovo;
- Producer of fodder and concentrates Sipovo; and
- Mushroom and herb-drying facility Sipovo (to be operational soon).

Regarding cereal production the area is not suitable enough to draw some comparative advantage out of it; that means that Pliva Area will continue to grow their grain for local consumption (mainly on farm consumption).

Chapter C 4. Pilot Project 1: PLIVA COUNTRY LODGING

4.1 Background

4.1.1 Location

The entire Pliva River valley is included in this project. However, for convenience sake any houses located more than a 25 minutes drive from the nearest of Jajce, Jezero or Sipovo may be excluded. This is a radius conditions that may be imposed only for the first group of host families to be trained, not at all any permanent condition. Urban as well as rural houses can be included in this program.

4.1.2 Socio-Economic Background

A questionnaire was circulated in the towns of the Study Area to collect basic information from families volunteering to enter this activity. There are several advantages in the local population for this kind of lodging service:

- Many have a love of the natural environment, pursue sports and nature-based activities themselves and can readily advise visitors about them;
- Many are eager to earn a new source of income possibly 30 45KM per person per night at the beginning. Many families have 2 or 3 generations living together or in nearby houses and can collaborate to run a small family business;
- A few already host visitors for long stays of several months or longer;
- Some candidates are returnees with direct knowledge of standards in European countries;
- Some candidates have family in European countries that can assist them financially and advise them on quality standards;
- A very few have foreign language ability, mainly German or Russian;
- Some recall the thriving room rental business in the area that existed in the pre-war era [*sobe*]; and
- Some candidates have extra rooms in sufficiently good condition that with little improvement they can be outfitted for rental.

However, there are significant drawbacks that must be dealt with in this plan:

 Many homes are not yet finished and their completion work will require a significant capital investment;

- Most candidate homes have substandard bathroom facilities that will require some upgrading;
- Many, perhaps most candidates have no working knowledge of any foreign language; and
- Knowledge of first aid and safety in handling emergency needs of visitors in and near the homes is insufficient.

Different features of this program can address these drawbacks. The JICA Study Team has determined that this project is feasible.

4.1.3 Relevance to the Master Plan

It is highly relevant for the following reasons:

- It will directly support the development of a range of sports and nature-based activities on a commercial basis;
- It will generate at least seasonal extra income for the host families, which could be extended to the winter season as well;
- It will build a business management capacity at a micro level that may become relevant to additional activities such as farm tourism, arts and crafts, tour guiding; and
- This first program may become just the first step in setting up a national system that will introduce the same approach to other communities.

In some of the community meetings the JICA Study Team indicated that these host families in a sense will serve as ambassadors for their town and culture, a concept which the candidates seemed to accept.

4.2 **Project Description**

4.2.1 **Project Objectives & Outputs**

Key objectives will include:

- 1) Capacity building in a first group of host families to offer international standard country lodging;
- 2) A simple system in place for the management and marketing of this system;
- 3) Close collaboration among members from the three communities; and
- 4) Close collaboration with the Pliva Sports Association facilitating the offer of sports and nature-based activities in the Study Area.

All these items will contribute the local households to maintain sustainable sources of income.

Key outputs will include:

- 1) Completion of a training course for host families in all aspects of this activity;
- 2) Outfitting and inspection of the homes for the first group of host families;
- 3) Training of the officers of the Green Pliva Association in the business system; and
- 4) Launch of rental activities by July 2004.

4.2.2 Management Structure

(1) Key Organizations or Individuals

This project proposes the creation of the *Eco Pliva Association* as an umbrella association. Two of its founding members are Mr. Mujo Sadikovic and Mr. Emir Sahman and they helped select Mr. Aleksic Ostoja of Jezero to lead this program. He lead this effort with the help of an officer of Jezero municipality, until October when Mr. Pilic Milorad, outgoing mayor of Sipovo, was appointed to replace him.

(2) Brief Job Description for Director

Essential responsibilities may include the following:

- 1) *Training:* Coordinate training with local or foreign expertise JICA will help arrange, including any study trips;
- 2) Selection of families: Work with JICA to finalize a fair selection system;
- 3) *Finance:* Work with JICA to finalize financial arrangements including creation of seed capital fund for host families;
- 4) *Reservations service:* Create this with the to be created Eco-House and define fee structure and prices;
- 5) *Booking commission:* Finalize booking commission for *Eco Pliva Association*, a standard contract for each host family, and cash handling procedures;
- 6) Safety & hygiene: Finalize standards and inspection system and implement it;
- 7) Insurance: Arrange blanket insurance policy covering all host families;
- 8) Promotion: Plan a promotion strategy with GPA leadership and execute it;
- 9) *Reporting to GPA & membership:* prepare quarterly or monthly reports to all participants on the operations and finances of the program; and
- 10) *Reporting to JICA:* Prepare a monthly status report to JICA until December 2004.

Necessary qualifications include:

- 1) Business experience: At least two years;
- 2) Age: 25-55;
- 3) Education: At least high school completed; and
- 4) *Bookkeeping ability*: One year of financial record keeping.

(3) Creation of New Association

Originally the intent was for the newly created Eco Pliva Association to operate the booking service. However, program officers decided to incorporate the country-lodging program separately and in late 2004 took the first steps towards incorporation. Chapter 10 has already addressed this topic.

4.2.3 Project Participants & Beneficiaries

For the launch group of host families, the JICA team's intention is to select 4 families from Jajce, 2 from Jezero and 4 from Sipovo. The beneficiaries will be these same host families, which often contain 2 and even 3 generations of members. Indirect beneficiaries will include their suppliers, namely nearby farmers [for food products], arts & crafts makers [for decorative items and souvenirs], and organizers of local sports [for sports & recreational services].

A critical factor for the success of this program is the success of the Eco Pliva Association and Pliva Sport Association in generating business from groups and independent visitors for all the sports and nature-based activities the river area offers: fly-fishing, canoe/kayak, hiking, hunting, wildlife watching, and the like. Good promotion is needed to generate boosted demand and raise the need for more host families directly expanding the pool of beneficiaries beyond the original 10 families possibly from the second year. During this year 3 additional families have expressed their desire to join the program as soon as possible.

4.2.4 **Project Activities**

The key activities planned include:

- 1) Selection of host families: The directors with the help of a JICA Team member make a final selection of 10 host families for training;
- 2) *Materials production:* The director designs and prints a bilingual leaflet for guests, a host family handbook, explaining program conditions, and limited training materials;

- Training: To provide services of adequate standard, the training of all host families is essential. A joint training approach with a local and foreign expert will be an activity for May or June;
- Business framework: The project director and co director will negotiate final arrangements with the EPA officers and a JICA team representative. The advice of the lodging trainers will be considered as appropriate;
- 5) *Reservations system:* The tourist information desk at the Eco-House can serve as the booking agent for this system and the personnel running this facility will need to be trained in procedures;
- 6) *Home inspections:* They must conduct occasional home inspections for teaching purposes and compliance with safety standards; and
- Promotion: With the EPA officers the directors of this program will agree on a plan and undertake activities such as sales calls and close coordination with Pliva Sport Association.

4.2.5 Financial Aspects

- 1) Startup costs
 - Instruction course with local, foreign trainers;
 - Group insurance premium;
 - Booking ledger;
 - Design, printing of set of guest leaflets;
 - Creation of 10 first aide kits;
 - Photocopy costs for training materials, host family handbook;
 - Essential training for host families; and
 - Logo design [shared with Eco Pliva Association].

A combination of JICA funding and host family program membership fees will cover these startup costs. The amount of the membership fee will be determined in May by the directors, EPA officers and a JICA team member. Members must commit to compliance with program rules to maintain its financial viability. The possibility of a low-interest fund enabling members to borrow to fund initial supplies [bed linens, towels, toiletries, etc.] will be explored during May and June.

- 2) Ongoing costs
 - Computer use for maintaining books, issuing reports;
 - Reprinting costs for handbook, guest leaflets, training materials;

- Cost share for EPA web site; and
- Cost share for Eco-House usage.

3) Income

For EPA:

- Booking fee possibly equal to 5% of bed/breakfast rate;
- July-August 20 bookings/family, 35KM payable as booking fee;
- Booking fees: 10 families owing of 350KM total;
- Membership fee: possibly 100KM per family: 1,000KM total; and
- Summer season income: 1,350KM.

For each host family:

- 25KM per person per night, 2 persons per party;
- 10 weekends, 2 nights per stay, 2 rooms per house;
- Gross income 2,000KM;
- Less 100KM for 20 bookings;
- Less 300KM for membership fee;
- Summer season income: 1,600KM; and
- Income for requested dinners is additional.

Families working closely with the sports clubs will generate additional income in the spring and fall seasons. Some can rent in the winter for winter sports visitors. Alternatively some may offer B & B only in the summer season, and rent long term to one tenant the rest of the year. Laundry and cleaning expenses are to be borne by the host families.

4.2.6 Implementation Schedule

Final details and training and preparations should be possible during May and June. Training possibilities have been discussed with organizations in Austria and France but no arrangements have been made. Most families should be able to start rentals by early or mid July latest if homes requiring no major improvement are selected.

4.2.7 Threats & Proposed Mitigation

1) *No foreign trainer arranged:* Since there are institutions in BiH offering food & beverage and lodging training the lack of foreign assistance at the start will not be a serious drawback;

- Weak bookings and low income: Host families will be able in a few cases to find long-term tenants to rent the rooms. Some may use word-of-mouth through contacts in Sarajevo to secure customers;
- 3) Avoidance of fee payment by host families: Members will understand that evidence of underpayment may be grounds for expulsion from the program;
- 4) *Emergencies involving foreign customers:* If there is no English or German speaker in the host family on hand, translators will be standing by with special telephone numbers; and
- 5) *Discontent of unselected families:* They must be assured that the program will be expanded if successful to include others. A system will be set up whereby once or twice a year training is to be conducted for the benefit of new host families.

4.3 Appraisal against the Five Criteria

4.3.1 Economic Impact

The net income increase per household from the summer season could reach 1,600KM or more if rentals continue into the fall. The costs for laundry and breakfast foods need to be deducted. From the second year this increment should be substantially higher.

The country lodging will make possible a flow of new visitor to the valley seeking not only lodging but also guide service, licenses for hunting, other food services, and for some taxi or bus transportation. There will also be some increase in food & beverage expenditure and shopping.

4.3.2 Wide Participation

Because of the probable need to select families with homes in good condition, to make possible a quick project launch, the most disadvantaged families will be excluded from the program, as their homes will need work.

4.3.3 Quick Implementation

Provided the training can be arranged for the host families, there should be no problem getting the homes ready. The challenge lies on the demand side to promote to get visitors to reserve the rooms and come to the Pliva Area.

4.3.4 Use of Local Resources

All labor involved for cooking and laundry will be local, and on the households. Many decorative items will be Bosnian, and in the training families will be shown attractive locally produced food items of all kinds, arts & crafts and supplies that they can use.

4.3.5 Sustainability

If the EPA and PSA promote to the sports market as proposed, the groups will be housed either with the country lodging host families, or at hotels or most likely at both depending on the volume of demand. Good collaboration between these two organizations is crucial. Booking fees for EPA will grow, and net income to the host families will grow. The initial 10 host families can in turn train newcomer families to help expand the system.

4.4 Evaluation & Lessons Learned

(1) Project Achievements

The host families received training both in the study area provided by a hospitality trainer from Banja Luka. They also made two study trips, to Zlativo in Serbia, and to Croatia's famous Istria area to examine conditions and quality standards in those areas. These trips were arranged in advance and included inspection of country lodging facilities and other types of facilities in those areas. This training exposed them to quality standards in established areas and gave them insights into rural tourism. The objective of capacity building for low income families was fully met. Many families have no earned income because they are unemployed, some for years.

Of the ten homes, most underwent limited physical improvements after going through the inspection process; the total budget was 27,200KM. One home still does not have a completed façade although the interior is fully completed.

Members from four families assisted with promotional efforts by giving presentations in Sarajevo, Banja Luka and Banja Vrucica at tourism meetings. This is valuable experience since promotion is a permanent function.

The families generally showed much enthusiasm for this activity and 3 additional families have asked to join the program for next year. There is a healthy desire by many families to support the program and to contribute to it to make it succeed.

(2) Areas of Weak Performance

The management of this project was originally handled by officers from Jezero municipality with the help of Eco Pliva Association directors. This arrangement changed in October when a new team of directors took office under Piljic Milorad of Sipovo. The project never created an association of its own which family members believe would be much better to clarify responsibilities and reporting and better manage resources. Current management intends to establish the organization by the end of 2004 or in early 2005.

Because of the novelty of this effort and limited guidance by JICA, management made decisions slowly and waited until October to hire a staff member to assist with promotion. While management did report on activities and finances at different points during the project, it was not on a regular basis and lacked clarity. A major obstacle was the lack of an office and staff member to serve as a base. Another obstacle is the total lack of familiarity with the Internet and computer skills of the directors selected.

The income level to participating families was very uneven and generally low. The project missed the season, because it got started in September after the July - August peak vacation period. One family reported 48 guest-nights equalling approximately 960KM in revenue since July. However, most guests were JICA Study Team members. Other families reported no revenue since their homes were not yet improved and ready to accept guests. This uneven performance is understandable during the program's first year.

(3) Ideas for Further Development

- 1) Management will formally create a registered association in the near term. Families believe this is critical for success and good management. Management must seek additional grant funding for the effort to survive during 2005;
- 2) Families wish to complete essential improvements to the homes next year to handle the summer season. They will seek additional funding for this purpose; and
- 3) They wish to continue and increase promotional efforts and will seek a way to fund promotional trips, brochure printing, and similar costs.
- (4) Key Lessons
 - Projects such as these will require closer monitoring by the sponsor agency since local stakeholders have no familiarity with business practices common in the capitalistic world and need much direction for this;

- 2) The sponsor agency must undertake closer monitoring to ensure good financial management of such projects to that the benefits are fairly spread without favoritism;
- 3) It is difficult to quickly start such programs to create flows of tourists in such a dysfunctional business environment as BiH where the tourist season depends on Croatia's season and lasts only during the summer months; and
- 4) The Pliva Valley will rely on sports & nature-based tourism. The success of its country lodging will rely heavily on the success of the Pliva Sports Activities offered by the Pliva Sports Association. Therefore, the sports program must develop to attract sports tourists before the Country Lodging program can be successful. This is a lesson of conditionality.

Table C 4.1 Project Design Matrix for PLIVA COUNTRY LODGING

Project Name:	Pliva Country Lo	odging	Project Area:	Sipovo, Jezero, Jajce	
Project Management:	Green Pliva Ass	sociation [GPA]	Target Beneficiaries:	10 households	
Project Commencement:	May 2004		Project Evaluation:	Oct. 2004	
Project Narrative Sur	nmery	Ind	icators, Cost	Data collection, Income	Assumptions
Overall Goal Rise in overnight visitors to Sipov	o, Jezero, Jajce		lies with new source of estic & foreign visitors.	Record of program participants	- Stability continues in BiH
Project Purpose Participating households earn a so of income through lodging busine				Record survey in Nov. 2004	- More households can join and be trained by initial 10 host families.
Output1. Business model and its org established (legally registered2. Tourists are satisfied with ac service creating good publicit3. Good coordination is set up Association, its twin associati4. The area earns recognition and eco-tourism destination.	d). ccommodation and y abroad. with Pliva Sports on.	 GPA gets sus in July - Augus 70% of the value for more All 10-host far and some cor 	stainable revenue 4,000KM st. guests are satisfied with ey of the accommodation milies stay with the program ntinue room rentals into the hs. Some may announce	 Study team checks legal documents and cash Study team checks Guest evaluation Monthly reports state joint activities accomplished with PSA. Interview survey to inbound tour operators in 2006. 	 Legalities can be clarified mid 2004 PSA also created as twin association.
Activities 1-1 Organize GPA to manage the 1-2 Consult and advise on progra 2-1 Train the 10 host families 2-2 Procure relevant equipment, 2-3 Improve the selected houses 3-1 Agree marketing strategy Association [PSA] targeting s 3-2 Promote Pliva R. with PSA to 4-1 Report monthly progress to J 4-2 Conduct monitoring, record-k	am rules supplies with Pliva Sports sports niches. target clubs. IICA team. seeping.	1. Administratic 2-1. Facility impro 2-2. Equipment (2-3. Training (5,0 2-4. Consultation 3-1. Activity planr (5,000KM)	00KM) (4,000KM) ning & Training ion fee (1,000KM) 5,000KM)	Income monthly Accommodation 10 houses x 2 rooms x 10 weekends x 30KM = 6,000KM (200 nights) Project fees: 2KM per tourist stay night 200 nights x 2KM = 400KM 10 host family membership fees @100KM = 1,000KM	- People and related organizations in Sipovo, Jezero, and Jajce willingly support the GPA.

Source: JICA Study Team

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Chapter C 5. Pilot Project 2: Pliva Eco-House

5.1 Background

This project is designed to create an attractive showcase for the best products produced in the region, e.g. fresh food products, processed ones and locally made crafts and items. The land for Eco-House development has been selected through the workshop process and the right to use the selected around 2,000 m² municipal land in Jajce Town, which was previously used for truck parking along National Main Road 5, has been granted by the Jajce Municipality. An Eco-House at this location would serve as a gateway and sales location for natural items, and also a source for all tourist information in the entire Pliva Valley. It would provide a high profile outlet for the low-income farmers of the region, crafts makers including largely women, and also provide lodging and recreational information services.

5.2 **Project Description**

Farmers in remote project areas have no access to agricultural markets. This project is designed to overcome this situation. The local counterpart Eco Pliva Association has been established to implement the contracted pilot project at the first stage. And the counterpart association registers Eco-House d.o.o for getting licenses to operate consignment sales and other activities of Eco-House from the municipal government.

An attractive roadside shop was established to sell mainly local agricultural and dairy products, but also some handicrafts like woolen carpets and textiles. Suppliers of these products, who contract consignment sale with Eco-House d.o.o, are local farmers, producers and women in the Pliva Study Area i.e. Jajce, Jezero, and Sipovo. This Eco-house sells not only the local products but also the "image" of the Pliva valley through diverse and qualified local products. Therefore, only the local products will be sold here and project activities include the improvement of quality of these local products and creating new local products.

To minimize business risks agricultural products will be sold on a consignment basis; that means farmers are just getting money if their products are sold. If some quantities remain unsold they will be given back to the producers. Based on the above risks on producer, commission rate for consignment sale will be set lower than 15% of selling price on their contract with Eco-House d.o.o. Also the manager and sales key person should be (mainly) paid on a success basis.

By three months operation the turnover has reached a volume big enough that 10% commission of this turnover are enough to cover the running costs and "salaries"; minimum 20,000KM per month in sales.

The Eco-House is composed from three buildings of Sales Pavilion (7x7m), Workshop / Packing / Storage Pavilion (7x7m), and Information Center / HQs / Handicraft / Toilet Pavilion (7x7m) on allocated $2,000m^2$ land including parking lot.

5.2.1 **Project Objectives and Outputs**

The objective is to make new domestic market for local agricultural products in the BiH. Farmers should be able to make profit by selling their products through the Eco-House outlet.

5.2.2 Management Structure

(1) Key Organizations or Individuals

The management must be market driven and should be responsible for the business activities without interference from governmental officials and various associations.

(2) Brief Job Description for Pilot Project Director

Job Description for Manager of Eco-House in Jajce:

- Previous sales experience required (direct contact to the client);
- Administration and PC skills required;
- Procurement experience in food and beverage would be an asset;
- Age 30 45 years;
- Driving license and own car necessary;
- Should be familiar with the area (grown up here) and should know most people here;
- Foreign language like English, Italian, German a strong asset;
- Knowledge about the food and vegetable market; and
- Dynamic, market driven and willing to bear economic risk.

(3) Creation of New Association

An organization "Eco Pliva Association (EPA)" was set up in order to undertake the management of this pilot project. EPA also managed the country lodging pilot project mentioned in Charter 11.

5.2.3 Project Participants and Beneficiaries

Indirectly all suppliers of agricultural and handicraft products (up to 100 people, as minimum turnover per month and farmer should be over 200KM).

5.2.4 **Project Activities**

(1) Institutional Setting-up and Business Plan

The Eco Pliva Association was established, directors board elected, bank accounts opened etc. A manager and shop staff were recruited for the projects. Legal status and tax issues are very important and were clarified at the very first stage of the project in order to avoid any possible trouble.

Formulating business plan is the other issue. In order for this pilot project to be sustainable, planning a realistic business plan is very important. Making the best local products available in Eco-House is up to the willingness of the local producers in the communities. This project expects farmers to become the member of eco-house and pay annual membership fee. This is a way to obtain their commitment to the participation to this project. Eco-House invites all farmers who are able and willing to offer products and handicrafts; samples have to be tested and prices discussed; minimum 20 farmers should be interested to deliver different products.

(2) Preparation of Facilities and Equipment

The project site, which is an existing truck parking near petrol station beside national main road 5 in Jajce Town, has been selected and an agreement was made among the relevant personnel to this pilot project; the right to use around 2,000m² municipal land for the selected site to be approved by Municipality Jajce. The land has to be developed to accommodate 3 buildings for shop, packing / storage / workshop, office / tourist information / handicraft shop / toilet / some other tourist amenities. All the furniture, equipment such as refrigerator, packing machine etc has been purchased.

(3) Training and Consultation for Members

Training and consultation has to be conducted with the purpose of making the sales products more attractive. Eco-House has to support farmers/suppliers about basic marketing issues, hygiene, fodder quality, packing, grading, and so on.

(4) Promotion

Not only the local people but also the vehicle passengers who drive through national roads in this region should be well informed on Eco-House. Promotion has been implemented through various media channels. The Eco Pliva Association prepared materials for web site development that handle all the three pilot projects in the Pliva study area.

5.2.5 Financial Aspects

Table C 5.1 Original Plan of Monthly Operation Cost and Turnover

Operation Costs Eco-House / Month	Real	Low budget
Administration incl. Telephone	200	100
Auditing (once a year)	50	50
Manager's fee (expected income)	1,000	800
Sales person's fee (expected income)	500	400
Tourist Officer (provided by Municipality Jajce)	0	0
Electricity for fridge and light	300	200
Electricity for heating	300	200
Packaging material	50	50
Maintenance building	200	200
Maintenance inventory	100	100
Cleaning toilets, etc.	250	250
Taxes	500	300
Total / month	3,450	2,650
Total / day	115	88
Commission charged on each sold product in %	15	15
Turnover needed per day	767	589
Turnover needed per month	23,000	17,667
Or as an alternative		
Commission charged on each sold product in %	25	25
Turnover needed per day	460	353
Turnover needed per month	13,800	10,600

Source: JICA Study Team

	Unit: K
Real	Low budget
17,000	12,000
17,000	15,000
10,000	8,000
2,000	1,000
1,000	1,000
1,000	1,000
4,000	2,000
10,000	4,000
3,000	2,000
5,000	2,000
10,000	5,000
80,000	53,000
	17,000 17,000 2,000 1,000 1,000 1,000 4,000 10,000 3,000 5,000 10,000

Table C 5.2 Original Plan of Initial Investment

Source: JICA Study Team

5.2.6 Implementation Schedule

Institutional set-up has been done by the end of May 2004. Construction work was completed in November.

5.2.7 **Threats & Proposed Mitigation**

The major risks are:

- Farmers are not willing to sell on consignment basis their products in the Eco-House; •
- Good products are not available; and •
- There is no demand for the local products. •

There is no easy solution for these issues. The pilot project should negotiate with farmers concerning conditions, support farmers to improve their products, and make effective promotion to attract customers.

5.3 Appraisal with the Five Criteria

5.3.1 **Economic Impact**

The whole region and especially the local suppliers of agricultural and handicraft products will get significant benefit if the turnover of the Eco-House achieves 23,000KM per month.

5.3.2 Wide Participation

Any farmers and suppliers of local products become members and sell their goods on consignment base. If we assume that each supplier will deliver products for 200KM per months than we will have around 100 suppliers.

5.3.3 Quick Implementation

A quick implementation is feasible and required not to miss the starting tourist season. Legal aspects and market driven decisions are important as well as the location.

5.3.4 Use of Local Resources

Only locally produced handicrafts and agricultural produce are preferred to be sold; therefore the local resources will be used in the best way.

5.3.5 Sustainability

If the turnover of the Eco-House will achieve 23,000KM per month then a 15% commission for the management will enable a sustainable business. It has to be taken into consideration that turnover in summer months will be significantly higher than that of winter season since there are more tourists and regional through traffic in the area.

5.4 Evaluation

Evaluation workshop for Eco-House Pilot Project was conducted in a participatory way same as the selection and preparation stage of the project at November 23rd, 2004. The manager of Eco-House d.o.o, staff, board members of Eco Pliva Association, local product suppliers, etc were invited to a focus group meeting for evaluation.

5.4.1 **Project Achievements**

(1) Delayed Implementation

Planned implementation schedule of Eco-House pilot project has been delayed on the unavoidable conditions and reasons as follows:

• **Registration of Eco Pliva Association:** one and half month delayed (June 22, 2004) based on lack of experience;

- **Contract and Commencement of the Project:** two months delayed (end of June 2004) by took time to coordinate and set-up the terms of reference of the project between JICA, JICA Study Team and the project leader (contractor);
- **Opening of Eco-House:** four months delayed (November 22, 2004). Status of joint-stock company registration was essential to get a license of consignment sales operation from the local government. Around two months were spent for registration process of Eco-House d.o.o including waiting time off strike in the authority; and
- Under the circumstance, a temporary opening ceremony was held with contracted local producers, previous and new mayors of three municipalities, representatives of counterpart ministries, TV crew in FBiH and Radio Jajce, etc at November 22, 2004.

The operational results could not be available based on the above delays (the evaluation workshop was held the next day of the temporary opening ceremony). Since the limited temporary opening, the operational results and data are limited for proper evaluation of the project at the present.

(2) Originally Proposed Goals and Purpose

Based on their result of the consignment contract with local producers and formulated business plan, an average income per contracted 90 local producers will get 140KM per month in the initial winter season till March. In the next summer peak season, the targeted 250 local producers will get 340KM per month.

Goal: Contribute to improve economy of Jajce, Jezero and Sipovo (sales of local product increase by 20%) Targeted achievement in winter season: 16,800KM /month (67,000KM/season) Targeted achievement in summer season: 95,000KM /month (571,000KM/season) Total achievement till September 2005: 63,800KM/month (638,000KM/10 months)

Purpose: Contracted local producers earn more income (200KM per month)

Category of local products	Initial Winter Season (Dec - Mar)	Next Summer Peak Season (Apr - Sep)
Local fresh vegetable	665	7,730
Local fruit	700	4,950
Grain / locally milled	295	3,050
Bread / bakery products	4,720	17,400
Dairy products	4,235	42,300
Fresh fish	300	2,000
Herb / mushrooms	600	2,400
Handicraft / souvenir	2,760	9,300
Others	2,550	6,000
- Target Monthly Sales	16,825	95,130
Daily	561	3,171
Seasonal Total	67,300	570,780
- Target Monthly Gross Income	2,524	9,513
Daily	84	317
Seasonal Total	10,095	57,078
Total amount till Sept 2005	67,173	
Repayment to local producer	14,301	85,617
Monthly income per producer	143	342
Number of local producers	90	250

Table C 5.3 Business Plan: Monthly	Consignment Sales Program
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Source: JICA Study Team

Table C 5.4 Business Plan: Monthly Operational Expenditure Program

Category of expenditure	Initial Winter Season (Dec - Mar)	Next Summer Peak Season (Apr-Sept)
Salary: Manager	Voluntary	800
Salary: Chief of consignment	Voluntary	600
Salary: Secretary / Info center	Voluntary	500
Salary: Sales Personnel (2)	600	800
Social Insurance: for all	1,250	1,250
Telephone (with internet)	280	400
Electricity	200	300
Water / Sewage	100	150
Truck Operation Cost*	200	900
Office / Printing / etc.	150	500
Workshop Cost	300	1,000
Others	400	1,000
Monthly Expenditure	3,480	8,200
Seasonal Expenditure	13,920	49,200
Total Expenditure till Sept 2005	63	3,120

Note: Pick-up truck will be donated from 3 municipalities and 2 counterpart ministries at Feb.

(3) Preparatory Works

The required preparatory works as follows were legally done but delayed.

- Scheduled registration work of Eco Pliva Association on the state level on June 22, 2004;
- Scheduled establishment of Managing Board of Eco Pliva Association: Eco Pliva Association is governed by 7 primary members of Board of Directors, consisting of the president, 2 members from Sipovo, 2 members from Jezero and 2 members from Jajce municipalities. Under the organized Board of Directors, the Eco-House Committee is established as actual implementation team including those for management/ accounting, facility development, promotion/ marketing/ product development, sales operation, and tourist information;
- Eco Pliva Association contracted Eco-House pilot project with JICA Study Team; and
- Additionally required registration work of Eco-House d.o.o: Eco Pliva Association registered, as NGO could not legally get a license to operate commercial business including consignment activities. For to get the license, Eco-House d.o.o was organized and registered as a joint-stock company for operation of all the required task and activities of Eco-House pilot project under the Eco Pliva Association. The Board of Directors, which are composed of 5 members, of Eco Pliva Board of Directors, of Eco-House d.o.o recruited a Manager for operation and management of Eco-House with appropriate business background and marketing knowledge.
- (4) Management and Accounting
 - Approval for the right of using around 2,000 m² municipal land for Eco-House Development: the existing truck parking space located on the side of National Main Road 5 in Jajce Town was applied and officially obtained for Eco-House development from the Jajce Municipality based on the agreed Mutual Cooperation Letter with majors of Jajce, Jezero and Sipovo;
 - **Consignment contract with more than 90 local producers:** Eco-House selected, registered and contracted with 90 local producers, who are residents of Sipovo, Jajce and Jezero municipality including a bakery shop and handicraft producers, through

workshop process. Contracted local producers have been submitted and negotiated their daily and monthly delivery schedule of each product;

- Formulation of Business Plan: business plan was finalized on the supply side data of consignment contract and demand side information of manager's knowledge of marketability for each consignment sales; and
- **Monthly Progress Reports** with accounting report and subsequent monthly schedule were occasionally prepared and submitted.
- (5) Construction and Procurement
 - Building Design Works were supported and properly done by the municipality Jajce;
 - **Eco-House development plan and building design** were submitted by Eco Pliva Association and it was permitted by the authority in Jajce;
 - Local tender (for 3 municipalities) and contract for foundation works was properly done;
 - Local tender (for 3 municipalities and surroundings) and contract for building construction works were properly done through an announcement on radio programs. It was evaluated on bidding price and capability for quick construction work.
 - **Foundation work** for building was started without report to the JICA Study Team. The study team suggested to revised building location (site layout plan) from the access point of view in the early September. Based on the suggestion, revised foundation works for 3 buildings were properly done;
 - **Construction works of buildings** (manufactured panel construction method) and built-in furniture for sales spaces were properly done;
 - Application of Municipal services of water, sewage and electricity and telecommunication were submitted and approved by the municipal government of Jajce;
 - **Digging works for all municipal service networks** were properly done through local tender procedure;
 - Installation of water supply and sewage pipe were properly done;

- Wiring works of Telecommunication with negotiation and contract process were done;
- Wiring works of Electric Power Network with negotiation and contract process were done;
- Garbage disposal and clean-up site;
- **Procurement for information center and office space** (office furniture, computer, equipment and materials);
- **Procurement for workshop/packing/storage pavilion** (vacuum packing machine and materials, scales and other equipment);
- Procurement for sales pavilion (register and materials and other equipment);
- **Design and production of stickers** for consignment sales goods;
- Design, production and setting of signboards for pavilions;
- **Design, production and setting of billboard** of Eco-House;
- Scheduled procurement of Pick-up Track could not be implemented based on the shortage of allocated budget by the excessive expenses for building construction works. For the issue, 3 mayors in the study area and two counterparts of Ministry of Trade and Tourism in RS and Federal Ministry of Trade have been discussed and decided to donate pick-up track for Eco-House. It will contribute to enhance delivery works of local producers and avoid their transportation cost; and
- Application of Japanese Grass Route Grant Aid for machinery and equipment has been submitted to Japanese Embassy in Sarajevo. Pasta making machinery set and small aquarium for live fish sales will effectively utilize more local materials and diverse local products. Photocopy machine and printer will strongly support monthly sales events and workshops. Projector and screen will support to organize proper workshops to improve hygiene, quality / design, package, etc.
- (6) Marketing and Promotion
 - **Design competition of Eco Pliva Logo Mark** through announcement of radio broadcasting;

- Preparation of materials (text and photo) for "www.plivatourism.ba" web site (sub-contracted project of the JICA Study Team);
- Visit to Agricultural Trade Fairs in Bihac and Zenica;
- Jointly visit to international tourism trade fairs in Teslic (e.g. Yugoslavian countries) and Banja Luka;
- Pliva and Velez Joint promotion for foreign residents (international agencies, donors and embassy) in Sarajevo;
- Implement Pliva and Velez Joint FAM Tour of travel journalists (around 10 persons) from Serbia and Montenegro and Croatia with other associations in Pliva and Velez regions;
- Making yearly marketing and promotion program;
- Negotiate and contract to open Pliva Eco-House Corner in Major Shopping Center (Wisa in Sarajevo);
- Eco-House opening campaign through Radio Jajce; and
- TV and radio broadcasting program for Eco-House Opening Ceremony.
- (7) Sales Operation

Consignment sales activities could not be officially and legally started yet without registration joint-stock company of Eco-House d.o.o till the end of November 2004.

(8) Tourist Information

Produced 2,000 sheets of brochure for Pliva Eco-Tourism by the JICA Study Team has been distributed on the visited tourism trade fairs and on the northern orders. For the next half-year, additional 10,000 prints of brochure is printing.

5.4.2 Areas of Weak Performance

(1) Improvement of Organizational Structure

Eco Pliva Association was originally organized as umbrella association to coordinate eco-tourism development in Pliva Area through discussions of local communities in Jajce, Jezero and Sipovo municipalities. It should concentrate to coordination of marketing and promotion activity, tourism product development, and harmonious eco-tourism development in three municipalities other than implementation or operation of Eco-House or other projects.

For improvement of Eco Pliva Association, leaders of other two pilot projects and newly creating projects in the future should join as members of the board of directors of Eco Pliva Association for enhancing more mutual cooperation and coordination on eco-tourism development.

Financial resources to maintain Eco Pliva Association should be collected from each implementation association as Eco-House d.o.o, Pliva Country Lodging Association, Pliva Sport Association and other newly creating associations. For that, Eco Pliva Association should make an agreement of membership fee with those associations and d.o.o under Eco Pliva (the membership fee will be 1 or 2% of annual operational income of each association).

Eco-House d.o.o should take up the main role of Eco-House operation. Eco Pliva Association, which is holding the registered all stocks of Eco-House, should take functions of monitoring activities of Eco-House d.o.o. Leaders of local producer for consignment sales should be invited as a member of the board of directors of Eco-House d.o.o for keeping more close coordination between both sides of supply and demand.

(2) Products Improvement

Most of planned tasks of product improvement are left to future activities. The coming winter season, when most of participated local producer will be off-season of their farming, dairy and other activities, could be good time to implement training workshops for product improvement and development. Activities for product improvement, which are workshop hygiene, qualified produce, package, design, recipe, new product idea, and internal competitive fairs, should be continued to keep motivation for creating an image of Pliva Products.

(3) Marketing and Promotion

The existing simple content of Eco-House on the web site "<u>www.plivatourism.ba</u>" should be developed including the contents as follows:

- Introduction contents of Eco-House Activity;
- Introduction contents of specialized each local food products (cheese, meet products, vegetable, fruit, local trout, flour by watermill, pasta used local flour, baker products used local flour, etc) including characteristics, peak season, recipe, etc;

- Introduction contents for each specialized local handicraft of wood product, pottery / ceramics, wool products, cotton products, etc;
- Contents of event program in Eco-House and campaign sales tour programs;
- Contents of Workshop program of product improvement; and
- Comment from customer.

Planned tasks of sales campaign tour to surrounding major cities of Banja Luka and Sarajevo and advancing international tourist destination as Bihac are also completely left to further activity. And Eco-House should participate to national or regional agriculture, handicraft and products fairs in BiH or Ex Yugoslavia. Additional billboard of Eco-House on the applied Japanese Grass Route Grant Aid should be properly managed.

(4) Operation

Eco-House is just opened on the early winter season, which is low productive and off tourism season in Pliva Area. Eco-House d.o.o has to endure and survive the difficult winter season till next summer peak season of rich local products and tourism activities.

In the winter season, minimized 3,500KM monthly operational expenditure (with voluntary works of manager and key person of Eco-House) will exceed around 1,000KM than 2,000KM monthly operational income. Seasonal operational deficit will be 4,000KM in four months in winter but it could be balanced in the next summer season. The remaining allocated budget (especially for training workshop fee) at present will not be enough to cover the operational deficit in winter. Eco-House d.o.o is trying to arrange sources to recover the above winter deficit by donations from local communities and Canton Tourists Community.

Planned task	Achievement	Cost (KM)	Things to do	Who and how
Preliminary works	 Registered Eco Pliva on 22.06.2004 Established Managing board of Eco Pliva Registered Eco-House d.o.o for sales operation 	Eco Pliva: 1,200KM Eco-House d.o.o: 2,000KM	 Reorganize/improve Eco Pliva Association for coordination body of Pliva Eco-Tourism development (include leaders of cooperating other two associations) 	Managing Board of Eco Pliva with 3municipalities, supporting two ministries in RS
Management and accounting	 Approved right use of municipal land for dev't Contract with auditing company Consignment contracts with 90 local producer Formulate business plan 	6,000KM (including other costs and fees)	 Eco-House sub-committee has to be improve with leaders of local producer Actual operation functions has to remove to Eco-House d.o.o 	Managing Board of Eco Pliva and Eco-House d.o.o
Construction and procurement	 Design/get permission/construct 3 pavilions and infrastructure Purchase furniture, equipment, billboard 	Construction: 77,000KM Purchase: 20,000KM Total: 97,000	 Donate Pick-up Track Donate Freezer, Refrigerator showcase, etc 	3 Municipalities aim cooperation with 2 Ministries Japanese Grass Route Grant Aid
Marketing/ promotion and products improvement	 Material for web site Visit to fairs Teslić, Zenica, Bihać Fairs Contract to open Pliva Product Corner in shopping center (Sarajevo) Opening Promotion on Radio Jajce 	3,000KM	 Organize workshops for quality/hygiene/ packaging improvement with local experts Implement sales campaign tour to Banja Luka/Bihac/ etc. Additional billboards for Eco-House 	Manager of Eco-House d.o.o with board member for training Japanese Grass Route Grant Aid
Operation	 Temporary opening ceremony with TV / Radio broadcasting on 22/11/04 	2,000KM	 Improve/establish management system for order/collection/store/ sale/repayment 	Manager and key sales personnel of Eco-House
Tourist information	 Material for web-site have been collected, tourist maps prepared and promotional material printed 		 Contract of commission rate for book keeping with other two associations Make promotion program with other two associations 	Manager and tourist information personnel of Eco-House

Table C 5.5 Achievement and Further Issues of Eco-House Pilot Project

Source: JICA Study Team

5.4.3 Key Lessons

Eco-House is proposed as an absolutely new consignment business to break through the seriously collapsed domestic market and trading system in the region and in BiH at large. Entrepreneurship and challenging spirits essential in modern commercial business activities are needed to initiate and execute a proper new consignment sales business of local products in three communities.

Entrepreneurship and challenging spirit were well received and in-planted in Eco-House d.o.o and in its manager as demonstrated in the way to solve many complications and difficulties in the limited short project period. These experiences and the lecture on Eco-House in Japan by the JICA Net (internet) Seminar were effectively assimilated as a useful operational Know-how and knowledge for their operation. But it could not be enough for their operation in the difficult winter season.

This winter season will be a chance to build confidence between local producers and group and together to create qualified local products and new products through workshops with proper local.

Chapter C 6. Pilot Project 3: Pliva Sport Activities

6.1 Background

Tourism Resources in Pliva Area contains the suitable and different types of potentials on sports and nature-based activities. The location of the activities planned in this project extend along the Pliva River from its headwaters above the town of Sipovo, to the lakes located just upriver from the town of Jajce. The relevance to the master plan is direct and substantial, since a likely strategy for this area is to develop as a favorite area for active sports and relaxation for people of all ages. The project lays a foundation for major redevelopment of these activities that in the Yugoslavian era were thriving.

6.2 **Project Description**

6.2.1 Project Objectives and Outputs

The goal of the Pilot Project is to introduce fishing and canoe / kayak sports oriented tourism products along the Pliva River and to set up a management system to safely and efficiently serve the growing number of sports visitors. As this result, sports tourism business has to create sustainable income for the local communities.

There are considerable numbers of sports associations that are active (or have potential) in receiving tourists and obtaining revenue from them for guiding or instructing. The fishing associations are a good example in each municipality. Tourist activities should be planned and conducted carefully in the pilot project area so that resources have to be sustainable through sports tourism operation. This project focus to involve hundreds of local people and increase their awareness for environmental protection.

Most importantly the primary objectives of this pilot project are to provide both <u>enjoyable</u> and <u>safe</u> recreational experiences for their guests. They will seek to accomplish those objectives by providing knowledgeable guides, valuable information, appropriate equipment, and safety response capabilities.

The Pliva Sport Activity is well positioned to grasp the tourism market with these attractive eco-tourism activities. The remainder of this section describe each of the eco-tourism activities enumerated below.

- Sports Fishing (particularly world class fly fishing destination);
- Kayaking and international regatta (flat water only, no whitewater);
- Canoeing and Rowing;
- Mountaineering (nature hiking and some technical climbing);
- Herb and mushroom picking ;
- Bird and animal watching (migratory and resident species);
- Photo Safari (wildlife photography);
- Mountain Biking; and
- Hunting.

(1) Sports Fishing

High quality sport fishing exists between the headwaters of the Pliva River and Plivsko Lake. The river is created by two enormous springs that produce vast quantities of pure cold water and these conditions are perfect for a wild fishery habitat. At its source the Pliva is perfectly clear and potable and supports a reasonable stock of native Grayling and Brook Trout. These species are found in reasonable numbers, but it appears that a well-designed stocking program would substantially increase the biodiversity of these fish

The Grayling is the fly fisherman's dream fish. It lives in wild pristine waters in wild pristine places. It can be very selective. It fights well and has a unique beauty like no other game fish in its category. The spring season beginning in April and extending to the summer is the Grayling season. The Brook trout fishery is an autumn sport fishing experience. The Brook Trout season extends through the month of October.

The banks of the Pliva River are very accessible at the northern reach of the river. This enables the angler to fish a large amount of water easily.

Historically, the Pliva was well known to fly fishermen. The war, of course, interrupted this activity. However, the fact that a quality fly-fishing experience is well documented provides substantial market proof that this is a feasible recreation activity that can be successfully offered.

The re-introduction of BiH to the prestigious world of fly-fishing occurred in 2003 when Team Captain led the BiH Competitive Fly-Fishing Team to the international competitions in Scotland.

The leader of Sipovo Fishing Association, who is also the leader of the pilot project, has extensive experience in the delivery of quality fly-fishing experiences. He has led tours throughout the world and has established a very credible fly-fishing business at the headwaters of the Pliva. Extensive knowledge includes all of the fly species and superb fly tying abilities.

(2) Kayaking, Canoeing, and Rowing

The water sport recreation activities consist of kayaking, canoeing and rowing. The unique characteristics of the water create a remarkable competitive environment. The water is always flat because it is "heavy" water caused by an additional atom of Hydrogen. Historically, the region has hosted international competitions including world class kayaking events. One negative characteristic of the flat water is that it is an ideal site for the breeding of mosquitoes.

The high season for all water sports activities is June, July and August. The shoulder seasons are April and May in the spring and September until the first snow in October during the fall.

A local Canoe & Kayak Associations of Jajce and Sipovo with extensive skill and experience are located in the region. They represent a considerable job training resource and will be one of the principle founders of the Pliva Sport Association.

(3) Mountaineering and Hiking

The narrow river canyons of the Pliva, Janj and Vrbas Rivers are almost entirely surrounded by high mountains. High mountains on the northwest and south and east include Dimitor (1,473 m), Vitorog (1,907m), Radusa (1,956m), Vlasic (1,740m), Ranca Mountain (1,473m) Lisina (1,337m), Manjaca (1,236m) and Cemernica (1,388m). Given this collection of natural resources it is most understandable that a long history of mountaineering has occurred in this region and represent a potentially significant eco-tourism activities.

Organized mountain climbing is done by a mounting climbing sport society called Vitorog. The most interesting locations for mountain climbing are mounts Vitorog, Ranca, Suhi vrh, Lisina, and Sokograd. Popular hiking destinations include the source of Janj River and the several caves found in the extensive limestone formations of this region. By example a typical hiking experience in the mountains surrounding the Pliva Area might include summitting the famous Ranca Mountain that has an altitude of 1,431m. The mountaineer would experience forests, minerals, medicinal herbs, mushrooms and wildlife viewing.

Based on the Director of the Mountaineering Society there is a need to perform a variety of trail improvements. There are several trails throughout the Pliva River region would benefit from:

- Well marked trail heads;
- Trail maps;
- Safety from mines; and
- Rest areas at 4 km intervals along the trails that conform to European mountaineering standards. These rest areas may include shelters for inclement weather.

Trail experiences in this area include:

- Flora and fauna;
- Ancient Greek;
- Roman salt roads to Vienna, Split and others;
- Heritage site where royalty had country estate;
- Vistas; and
- Medical herbs and variety of wild mushrooms.

(4) Bird and Wildlife Watching

There is a significant diversity of bird species that may be easily seen in the Pliva River valley. This region provides habitat and refuge for both resident and migratory bird species. The fact that the water is open year round, the huge quantity of both flat and white water, and the abundance of insects should make this a haven for birds. The region offers both still and flowing water, a diversity of cover, and a variety of nesting sites to provide a profusion of superb bird habitat. The range of species frequently seen extends from swans, geese, eagles, hawks, and falcons to other water, shore, and song bird species. It is estimated that approximately 240 distinct species of birds are either resident or migrant species inhabiting this region.

In the Pliva River region there are unique communities of ponds and swamps of the *Phragmitetea* class, and *Magnocaricetalia* order. Communities of this class are developed in the proximity of still and flowing water. These environments are ecologically significant because they are particularly important resting sites for migratory birds.

The road system along the entire length of the Pliva River makes viewing bird species a very accessible sport. Bird Guide Books would be a valuable resource for conducting bird identification tours. Any effort to properly document the bird species would produce a potentially strong attraction to the bird watching market. In addition, equipment such as spotting scopes, binoculars and telephoto lenses would be essential for conducting bird watching tours.

(5) Hunting

The Pliva River Region, and particularly the Sipovo area, has one of the richest wildlife environments in the country. These environments provide habitats rare mammals such as brown bear (*Ursus arctos*), black grouse (*Tetrao urrogallus*), wild boars (*Sus scrofa*), wolf (*Canis lupus*), deer (*Capreolus capreolus*), fox (*Vulpes vulpes*), pine marten (*Martes martes*), and rabbit (*Lepus europaeus*). An especially rare animal that is located in this region is the lynx (*Lynx lynx*), which appeared in the area only after the war was over.

Due to the abundance and diversity of water resources, the area is also a habitat for the otter (*Lutra lutra*), which is a rare species in Europe, and which is a protected species in BiH. Other permanently protected species populating this area include *Sciurus vulgaris* and *Mustela nivalis*. As previously mentioned, the water resources and general remoteness of the region also provides valuable habitat to bird species. By examples, the inaccessible areas are inhabited by large populations of eagles and falcons

Hunting as sports-recreational activity has a long tradition in Sipovo. The Hunting Area is an extensive amount of land that covers about 243km². This land is managed through 10 years Long Term Forest Management Plan/Hunting Program and Yearly Forest Management and Hunting Plans by public Forest Enterprise called "Gorica". There is a hunting society "Tetrijeb" which organises trophy hunting for species such as brown bear, big mountain cock, boar, and wolf. Bird and small game hunting is also active and the species that are hunted include duck, geese, rabbit, and squirrel under the framework of Hunting Plan.

There are 6 hunting lodges (cekas) that offer excellent accommodations to hunters in the Pliva River Region. These establishments can accommodate 20 hunters. Hunting homes are located in the following places: 2 in Rodusa, 1 in Ljusa, 1 in Natpolje, 1 in Kupreska rijeka and 1 hunting home in Lisina. Several hundred hunters from the country and abroad participate in the traditional wolf hunt that is organized annually in February.

Hunting is not being pursued by the Pliva Sport Association as an eco-tourism activity. Issues regarding both the safety of the animals and the tourists were voiced during the Pliva Area Workshops. The safety of the animals is rather obvious. The animals would appear to have more recreational value as a rare species than as a hunting trophy. The safety of the tourist is manifested in the concerns about mines and unexploded ordinance that are still prevalent in the mountains of the north and west border area of Jajce municipality. In deference to the hunters, they deserve positive recognition for preserving the habitats of rare wildlife and for their intimate knowledge of the environmental conditions of the region.

(6) Photo Safari (Wildlife Photography)

Given the rarity and abundance of wildlife species in the Pliva River Region, wildlife photography represents a very feasible eco-tourism activity. This is also one of the most profitable eco-tourism activities that can be pursued. The Pliva Sport Association has the personnel qualified to lead this type of activity. In many parts of the world the Photo Safari is quickly replacing the hunting safari. There are more persons willing to participate in this activity, there are no seasonal limitations, and the support of thriving wildlife populations provides increased opportunities to successfully photograph animals.

This eco-tourism activity was mentioned and seriously discussed during the Pliva Workshop sessions. The positive aspects that were emphasized are the diversity of wildlife and the beautiful vistas. The negative aspects are explosive mines, the absence of guidebooks, and the shortage of trained naturalists.

(7) Heritage (Archeological Sites) Touring

There are hundreds of ancient archeological sites that have been accurately mapped and recorded in the immediate vicinity of the Pliva River from the headwaters to Jajce. The JICA team obtained lists of these sites and maps of their location.

1) Hundreds of Heritage Sites

There are literally hundreds of archeological and historical sites that have been identified and mapped throughout the Pliva Area. The antiquity of these sites extends from the ancient Roman Period (the 1st through the 4th centuries) through the Middle Ages (to approximately the mid-1500's). However, proper scientific archeological research had been done for the limited number of heritage sites before the previous war, most of sites has not been properly researched yet.

2) Location and Verification of Access

The vast majority of heritage sites are located near rivers or they are in relatively accessible valley systems. Many of the sites are within the limits of existing communities. In terms of the physical terrain and proximity to road systems, many of the heritage sites are easily accessible.

However, both the integrity of the heritage sites and safe routes to them need to be verified. They may have suffered destruction during the recent conflict and/or the routes to them may have become either damaged or mined. For these reasons, they need to be re-surveyed to determine their attractiveness and their safety. This is an important consideration, but not a constraint to this type of tourism since there are many hundred sites.

3) Sipovo - A Representative Example of Heritage Tourist Attractions

Many of the high quality eco-tourism attractions in the Pliva Area are located along the upper reaches of the Pliva River near the Town of Sipovo. Given this reason, and the fact that this was the least mined area during the war, it is of value to describe three examples of the types of heritage attractions that can be offered to tourists visiting this area. The three examples include ancient structural remnants and artifacts from the Illyrian, Roman, and Bosnian Kingdoms that may be viewed and experienced by the eco-tourist.

Sipovo has been inhabited continuously for more than 3,500 years. The oldest remnants of permanent settlement in this region consist of about 30 ruins located throughout the Sipovo Municipality by the Illyrians during the Bronze-Iron Age (1500 - 500 BC).

Judging by numerous artefacts and ancient inscriptions, there was a significant Roman municipium (self-governing town) in Sipovo with an unknown name. History will later record the name of the settlement as Baloja (Balea, Baloie). Significant structural remnants of the Roman Empire's influence remain today. At the east periphery of Sipovo, close to Pliva, in Gromile are the ruins of an antique castrum (military camp). This facility is dated to be most probably from the first or second century of the Empire. The main settlement itself ("municipium") was located a bit more to the west on the hill called Crkvina that rises from the Sipovo town. Remains of a Roman construction (terma) as well as large pieces of a grave-stone with carved faces and wreaths can be seen in the town park.

The Roman Empire built a very important road that connected the Danube River Valley with the Dalmatian Coast. This road was called the Roman Path of Salt and it is partially visible

even today. It went through the valley of Pliva and over Kupreško polje connecting Dalmatia with Podunavlje. A Roman inscription (60cm x 60cm) was found in its proximity in Janj, in the canyon of the brook Vaganac. The message are orders from Lucije Aruncije Skribonijan, the emperor Caligula's governor of the region Dalmatia directing the centurion Manlije Celije from the 7th Legion to distribute land and set boundary stones between the Sapuat and Emantin, and Iliric tribal boundaries.

The most significant monument of the Middle Ages in the Pliva valley is the summer palace of Sokol (Sokograd). The ruins are located in Sokolac above the steep canyon of Sokocnica. Under Sokol, whose name means "rock of the hawk" and thus accurately reflects its steep position, Hungarian-Croat king Ljudevit was defeated in July 1363 when he tried to conquer the Pliva and Vrbas parish to weaken duke Tvrtko. Credit for the victory belonged to Vukcic Hrvatinic, father of the great duke Hrvoje, who defended the town. For that Tvrtko repaid "... his faithful servant named duke Vukcic Hrvatinic for his faithful service ..." and gave him "nobly" whole Pliva parish with Sokol as its center. Hungary-Croat kings tried to conquer Sokol without success, first Ljudevit and then Sigismund (1405). Town fell into Hungarian hands only in 1463 when the Bosnian state disappeared. The last Bosnian king Stjepan Tomasevic spent a short period of time in Sokol where he attempted to slow the Turkish attack.

These examples illustrate only a small sample of the remarkable array of heritage attractions that can be viewed in the Pliva River Valley. When considering the development and implementation of an eco-tourism plan that emphasises sport activities, it is important to remember that all members of a family may not want to spend all of their time engaged in sports. The availability of cultural and heritage tours offers an attractive alternative to those family members seeking a more passive type of activity.

6.2.2 Management Structure

A significant result of the workshops was the decision to create a single entity called that Pliva Sport Activities Association (PSA) that take responsibilities of the implementation, management and promotion of nature and eco -oriented sport activities along the Pliva and would also take responsibility to improve and safeguard the environmental quality of the region. The two issues of economic development and environmental quality are inseparable. The only way that eco-tourism can be successfully sustained is to insure that the environmental quality of the region is protected. PSA realize that they have a very unique water resource.

The use of the Pliva River as an eco-tourism recreation attraction was a prominent feature of the workshops conducted in the Pliva Area. In addition to agreement among the three communities there was also agreement among the several recreation providers that the natural resources of the Pliva are the primary attractions upon which to base eco-tourism development of this region. Specifically, the Sports Fishing, Kayaking, Canoeing, Rowing, Mountaineering, Trekking, and Hunting, leaders of the Pliva region expressed the need to strongly support each other's recreation development endeavors.

The need for mutual support was defined in terms of a shared client base, the need for joint action to promote the area, and a solid dedication to improve and sustain the environmental quality of the Pliva River and its mountainous watershed. The leaders immediately recognized the need to work together to provide multiple beneficiaries.

(1) Key organization: The Pliva Sport Activities Association (PSA)

It were decided by the members of the Pliva Area communities that the existing Sport Fishing and Canoe / Kayak Associations should form the nucleus of the Pliva Sport Activities Association and then plan and implement the Pilot Project. Representatives from the existing sport associations in 3 municipalities form a Board of Directors. The leader of the Sport Fishing Association Sipovo was appointed for the Chairman of this Board. It was made the consensus by members of the association that additional sport associations have be welcome to join the PSA as the eco-tourism activity projects evolve.

(2) Brief Job Description for Director

The Director of the PSA shall have specific qualifications and shall perform specific functions. The basic qualifications of the Director shall include:

- Professional knowledge of at least one recreation activity based on at least five years of experience;
- Competent knowledge of the environmental resources of the Pliva region based on at least five years on-site experience;
- Tourism management experience based on proven ability to successfully lead recreation activity; and
- Knowledge of at least two languages.

The specific functions of the Director shall be to manage the coordination of sports activities conducted in the Pliva River Valley to include:

- Accurately identify the types, locations, and seasons for recreational activities offered by the PSA;
- Actively coordinate the promotion of the Pliva Sports Activity;
- Actively work with the several sports associations and clubs to assure visitor safety; and
- Serve as the clearinghouse for communications among Pliva Sports Association members in order to assure that economic development, tourist enjoyment, and visitor safety are achieved.

In addition, the director will fully collaborate with the Eco Pliva Association on promotion and other types of activities of mutual benefit.

6.2.3 **Project Participants and Beneficiaries**

(1) Human Resource Development Opportunities

The Human Resource Development sustainability performance indicators, each of which can be measured and evaluated, include:

- Numbers of jobs;
- Employment skills;
- Personal income; and
- Educational attainment.

In the case of the Pliva Sport Activity pilot project there two distinct Human Resource Development functions that should be considered and accomplished. The first is to provide training for tourist enjoyment and the second is providing visitor safety. The first category of job training involves teaching hospitality, guiding, language, and educational skills. The second requires training to provide emergency medical response, evacuation, search and rescue, and radio/cell communication network skills. When implemented, the safety skills should have the additional benefit of increasing the human infrastructure of the communities. In other words, people who have emergency medical skills and knowledge of timely evacuation techniques can improve communities self-reliance.

Based on the workshops and review of the interviews, it was evident that key persons have the essential knowledge needed to create hospitality and guide training programs. It was not entirely evident that these same people had the necessary visitor safety skills. Clearly, all of the people that we met with and those interviewed were both willing and capable of learning the skills required to deliver a successful eco-tourism program. In judgment, supports of the numerous sports activities proposed provide significant benefits on Human Resource field.

In order to accomplish sustainable projects, it is appropriate to consider education as an integral part of the pilot projects. Based on a review of the "Key Person Survey" it appears that youth group leaders and educators have been introduced to the JICA project and that they are strongly supportive of this endeavor. A direct educational relationship between these key persons and the leaders of pilot projects has yet to be established, but it is very encouraging that a number of people are willing to play this role. Their local knowledge and skills have to make a valuable contribution to the establishment of sustainable projects through environmental awareness in the local communities.

(2) Types of Jobs Required to Accomplish the Pilot Project

A summary of the types of jobs required for the delivery of safe and enjoyable eco-tourism activities previously described are as follows:

Eco-Tour Guide Services:	Sport fishing, Kayaking, Canoeing and rowing, Mountaineering,					
	Nature guides (animals & plants), Bird identification, Culture,					
	history and archeology					
Safety and Emergency S	ervices: Emergency first aid, Mountain search and rescue, Water					
	safety and rescue, Safety communication, Equipment					
	maintenance / repair					
Hospitality Services:	Guest services					
Environmental Education: Pollution prevention, Resource monitoring, Coordination with						
	schools & youth organizations					
Promotion:	Artists (creation of signs, brochures, maps), Publishers (printing of					
	Brochures and Maps)					

6.2.4 Project Activities

The Pliva Sport Association (PSA) has to implement the following key tasks:

- 1) Finalize a business plan to implement during 2004;
- 2) Help conclude an agreement with a sports organization for technical support;
- 3) Coordinate training of fishing and canoe/kayak guides with instructors;
- 4) Design and build the Sport Center;
- 5) Install suitable communication system [walkie-talkie] and define safety system;
- 6) Recruit for membership local and regional sports organizations;

- 7) Promotional activities like farm trips, sales calls, web site content;
- 8) Set up the needed accounting books and reporting procedures for transparency;
- 9) Submit a status report monthly on recent activities, progress and problems; and
- 10) Coordinate as necessary with JICA Study Team at every step.

6.2.5 Financial Aspects

A variety of income sources can be derived from the operations of the Pliva Sport Activity. The followings represent examples of those potential sources of income:

- 1) Sale revenues of daily fishing ticket;
- 2) Membership fees;
- 3) Rental revenues of fishing gear;
- 4) Sale revenue of fishing gears in pro-shop;
- 5) Sale revenue of foods and beverage in the center;
- 6) Booking commission for country lodging;
- 7) Referral fees for booking Sports Activities;
- 8) Referral fees for booking Nature and Heritage Guided Tours;
- 9) Sale revenues from guidebooks and other nature publications;
- 10) Sales of maps;
- 11) Rental of land based equipment, such as binoculars or daypacks;
- 12) Specialized guide services;
- 13) Specialized skill training, such as fly fishing and kayaking; and
- 14) Kayak and canoe rental fees derived from a fleet of 6 water craft.

6.2.6 Implementation Schedule

The following implementation was expected.

March and April, 2004: Creation and registration of the Pliva Sports Association Produce promotional materials to market Identify target markets. April and May, 2004: Create the PSA recreation program plan for sport fishing, kayaking, canoeing, and mountaineering tourism activities. Teach recreational skills. Teach safety skills. Contact and promote key representatives of the target markets. June - October, 2004: Implement recreation program plan. Build Sport Center. Build river rest stops, picnic, and waste collection facilities. Continue to teach recreational and safety skills.

November & December, 2004: Evaluate the success of the PSA recreation program plan.

6.2.7 Threats & Proposed Mitigation

Serious Tourism Competition:

Mitigation Measure: Establish credible market presence by excellent placement of promotional materials, securing favorable publicity, establishing a credible internet presence, and implementation of a marketing plan.

Poor Publicity associated with the Balkan Region:

Mitigation Measure: Remove the land mines and prove to world that these have been removed from the Pliva River Valley. Also establish a vital publicity campaign to offset any negative publicity from the region.

Lack of adequate telecommunications:

Mitigation Measure: Closely coordinate efforts among the members of the PSA, the region's tour agencies, and the telecommunication providers.

Lack of Accommodations:

Mitigation Measure: Work closely with other Pilot Project to insure that PSA guests can obtain comfortable hospitality services.

6.3 Appraisal with the Five Criteria

6.3.1 Economic Impact

The economic impacts created by the Pliva Sport Association shall include increased revenue, jobs, educational attainment, benefits to associated tourism activities such as accommodations and the eco-house, and the re-establishment of a strong market.

6.3.2 Wide Participation

The Pliva Sports Activity will enjoy wide participation from residents throughout the entire Pliva River Valley. Specifically the following residents of Sipovo, Jezero, and Jajce will be participants in the Pilot Project:

- The many members of the Sport Fishing, kayaking, mountaineering, and hunting clubs and associations;
- The people who work in the hotels, motels, and bed and breakfasts;
- The people who work in the restaurants of the Pliva Valley;
- The people who will provide tourism support services such as guides and equipment rental personnel;
- People who maintain and repair facilities and equipment associated with tourism in the Pliva River Valley; and
- People who sell crafts and agricultural goods to the PSA tourists.

6.3.3 Quick Implementation

A quick implementation is feasible and required not to miss the starting tourist season. Legal aspects and market driven decisions are important.

6.3.4 Use of Local Resources

The most fundamental local resources for the accomplishment of the Pliva Sports Activity project are as follows:

- The region's natural resources; and
- The region's human resources.

There is no other Pilot Project that will use more local resources than the PSA Project.

6.3.5 Sustainability

The achievement of Sustainability requires the following four criteria:

- Economic feasibility: To generate more than 1,000KM /month operational income will be more than operational expenses;
- 2) Environmental integrity: To promotion of environmental quality through restore the region's natural resources and creating excellent stewardship of those resources;
- Respect for local cultures: In a land that has had bitter conflict, it is very encouraging that the importance and quality of the Pliva River is valued by all members of the communities of Sipovo, Jezero, and Jajce; and
- 4) Visitor satisfaction: The world class recreation activities have historically, and should in the future, promote visitor satisfaction.

6.4 Evaluation

Evaluation workshop for Pliva Sport Activity Pilot Project was conducted in a participatory way same as the selection and preparation stage of the project at November 22nd, 2004. The director and board members of Pliva Sport Association, related local association, etc were invited to a focus group meeting for evaluation.

6.4.1 **Project Achievements**

(1) Delayed Implementation

Planned implementation schedule of Pliva Sport pilot project has been delayed on the unavoidable conditions and reasons as follows:

- **Registration of Pliva Sport Association:** more than 3 months delay (Sept, 2004) based on lack of experience;
- **Contract and Commencement of the Project with EPA:** two months delay (June 2004) by took time to coordinate and set-up the terms of reference of the project between JICA, JICA Study Team and the project leader (contractor); and
- **Opening of Sport Center:** more than four months delay (December, 2004).

The operational results of Sport Center could not be available based on the above delays (the evaluation workshop was held the same day of the temporary opening).

(2) Achievement of Goals and Purpose

Based on their result of the operation of proposed fishing products and formulated business plan, daily fishing tickets (25KM) were sold over 80 tickets in Sipovo and over 300 tickets in Jajce for international and domestic fishermen in the period, it is estimated 9,500KM in the total.

Goal: Participating associations generate sustainable income through relevant activity business. In the period, participated associations were 5 associations of Sipovo Fishing, Jezero Fishing, Jajce Fishing, Jajce Canoe / Kayak, Sipovo Canoe / Kayak Associations, partialy participated Sipovo Mountaineering Association. The other potential candidates of mountaineering, herb / mushroom, hunting, etc could not be fully participated in the period yet.

Actual revenue in September could be guess to over the original targeted revenue in September (800KM /month)

- Purpose: Original plan set the target as more than 1,000 tourists come and stay longer in Sipovo, Jezero and Jajce. The monthly tourist arrivals could be guess over the target figure in the region at September 2004.
- (3) Preparatory Works

The required preparatory works as follows were legally done but delayed.

- Scheduled registration work of Eco Pliva Association on the state level on June 22, 2004;
- Eco Pliva Association contracted Pliva Sport Activities pilot project with JICA Study Team on June 2004;
- One of member of the board of director, who was the leader of the pilot project, was rejected on the board meeting on August 2004;
- New Pliva Sport Activities Association registered on RS entity on Sept. 2004; and
- New PSA re-contracted the Pliva Sport Activities pilot project with JICA Study Team on Sept. 2004, all of the contracted right to implement and operate of the pilot project has been transferred from EPA on the time.
- (4) Management and Accounting
 - Approval for the right of using of municipal land for Pliva Sport Center **Development:** The vacant land located on the side of the headwaters of Pliva River;
 - **Organize taskforces:** all of 6 members of the board of director of PSA take key roles of each taskforce of management, project implementation, marketing & promotion, training & education, operation of fishing, operation of canoe / kayak, operation of eco-tourism and safety & rescue;
 - Formulation of Business Plan: business plan was made and coordinated with JICA Study Team by the leader of the pilot project; and
 - **Monthly Progress Reports** with accounting report and subsequent monthly schedule were occasionally prepared and submitted.
- (5) Construction and Procurement
 - **Building Design Works** were well done with traditional arch-type and local materials;
 - **Pliva Sport Center development plan and building design** were submitted by PSA and it was permitted by the authority in Sipovo;
 - Local tender for construction works of the Sport Center was properly done;

- Construction works was delay but have been done and finished;
- Application of Municipal services of water, sewage and electricity and telecommunication were submitted and approved by the municipal government of Sipovo;
- Installation works of water supply and sewage pipe were properly done;
- Wiring works of Telecommunication with negotiation and contract process were done;
- Wiring works of Electric Power Network with negotiation and contract process were done;
- **Procurement work for office space** in the center (office furniture, equipment and materials);
- Procurement work for fishing (fishing gears, fly making, fish hatchery);
- Procurement work for canoe / Kayak (boats of canoes / kayaks and repair materials);
- Procurement work for river cleaning boat;
- **Procurement work for safety & security goods** (walky-talky, first aid sets and mountain bikes);
- Design, production and setting of billboard of Pliva Sport Center; and
- **Fish Restocking** (direct implementation by the JICA Study Team) for recovering fish resource damages by the heavy flooding disaster in the last spring.

Activities	Expense	Remaining	Total (KM)
1. Construction Works of Pliva Sport Center	35,600	0	35,600
1.1 Fabrication of Sign Board for Pliva Sport Center	1600	-	1,600
1.2 Construction of Pliva Sport Center Building and Landscaping	34,000	-	34,000
2. Procurement of Equipment and Furniture	52,100	0	52,100
2.1 Office Furniture, P/C and Equipment	2,500	-	2,500
2.2 Rubbish Bins / Containers	2,000	-	2,000
2.3 Boat/equipment for river cleaning	1,400	-	1,400
2.4 Canoes / Kayaks	6,500	-	6,500
2.5 Maintenance equipment and materials for Canoes/Kayaks	1,500	-	1,500
2.6 Walky-talky and security equipment	3,000	-	3,000
2.7 Fishing tackles for training	3,000	-	3,000
2.8 Equipment and materials for fly workshop	1,200	-	1,200
2.9 Equipment for fish spawn	11,000	-	11,000
2.10 Fish Restocking for Headwaters of Pliva & lake in Jezero	20,000	-	20,000
Total	87,700	0	87,700

Table C 6.1 Construction and Procurement Works

Source: JICA Study Team 2004

(6) Education and Training

Most of the schedule workshop programs were postponed by the delayed opening of the sport center, which has to take a function for workshop place. The postponed workshop programs as follows have to be implemented in this winter season before the next activating spring season.

Activities	Expense	Remaining	Total (KM)
3. Training	2,350	4,750	7,100
3.1 Training workshops of sport fishing / fly making	500	500	1,000
3.2 Instructors Training of canoe and kayak	350	350	700
3.3 Guide Training of mountain climbing/hiking	-	700	700
3.4 Guide training of Photo-safari:	-	700	700
(bird watching / research / monitoring)			
3.5 Guide / instructor training for herb / mushroom collection	-	1000	1,000
3.6 Training of Watch Keepers	500	500	1,000
3.7 Training of Health / Safety / First Aid	1,000	1000	2,000

Table C 6.2 Education and Training Programs

Source: JICA Study Team 2004

(7) Marketing and Promotion

- Joined to International Fly-Fishing Championship in Slovenia and promote Pliva Fishing Tour Products for the attending international anglers and key persons of each national fishing association on April 2004;
- For "www.plivatourism.ba" web site: Prepare materials (text and photo) (sub-contracted project of the JICA Study Team);
- Send E-Newsletter to introduce the web site to major sport associations (fishing, canoe/kayak, hunting etc) in the focused market countries;
- **Organized small Fly Fishing Competition** for Familiarization Tour groups and TV cruises from ex Yugoslavian countries as Slovenia, Serbia and BiH;
- **Organized National Fly-Fishing Championship of BiH** on the headwaters of Pliva River;
- **Presentation on International Tourism Trade Fairs in Teslic** (Ex Yugoslavian countries) and Banja Luka;
- Pliva and Velez Joint Promotion for foreign residents (international agencies, donors and embassy) in Sarajevo;

- Implement Pliva and Velez Joint Familiarization Tour of travel journalists (around 10 persons) from Serbia and Montenegro and Croatia with other associations in Pliva and Velez regions; and
- Agreement for Joint Promotion Program with Slovenian Fishing Association for Western, Eastern and Southern European countries.

Activities	Expense	Remaining	Total (KM)
4. Promotion	5,200	0	5,200
4.1 Promotion Tour to Slovenia	2500	-	2,500
4.2 Other Promotional Activities	2700	-	2,700
Total	95,250	4,750	100,000

Table C 6.3 Construction and Procurement Works

Source: JICA Study Team 2004

(8) Operation of Fishing Activities

Management, guiding and watching of fishing activities and issuing and selling daily fishing ticket were properly done by the employed 2 watch keepers and the members of board of director of PSA. Most of overnights stay fishermen were introduced and stayed in the candidate families of country lodging as their accommodation based on the agreement for package product idea with PCLA in Sipovo area.

(9) Operation of Canoe and Kayak Activities

In summer season, many day-trip groups, domestic tourists and transit international tourist were together to the area of Restaurant Plaza and Motel Plisko Jezero on the coast of Plivsko Lake. Jajce Canoe / Kayak Association was renting their own canoes and kayaks for tourist and school pupils with instruction of safety (free of charge for their initial testing purpose).

(10) Operation of Eco-Tourism Activities

JICA expert was implement the training programs for hiking, mountaineering, bird and wildlife watching etc for members of local sport associations. Unfortunately those eco-tourism products could not be ready yet, therefore PSA could not invite tourist for those activities.

6.4.2 Areas of Weak Performance

(1) Improvement of Organizational Structure

The leader or board member of PSA has to be re-appointment to a board member of Eco Pliva Association for to set-up and implement the well coordinated events and promotion programs for Pliva Region as a whole.

Improvement of Pliva Sport Association, the registered PSA on the authority of RS entity has to be re-registered on the state level for keeping mutual cooperation between communities in the both of RS and FBiH entities. Leaders of mountaineering, herb/mushroom collection, hunting and other eco-tourism related associations and NGOs has to be appointed as a member of the board of director PSA as for well developed and integrated organization to establish diverse nature and eco-tourism destination.

(2) Facilities Development and Equipment Improvement

For coordination of water related tourism products, **Surface Water Zoning Plan** will be required to avoid conflict between activities related water especially boating and fishing.

For example; headwater zone - fly-fishing and calm activities, middle stream zone - sport fishing (morning / sunset time) and rafting (noon time) activities, lake zone-1 - surf-fishing / wildlife watching, lake zone-2 - pleasure boating, lake zone-3 - regatta, lake zone-4 - boat fishing, etc.

Water related tourism activities are identified as high potential tourism products in the region. Establishment of **River Trail System** will be required to link the potential activities and provide appropriate level of access to the identified sports along river and lake.

For Canoe and Kayak product, the limited number of canoes and kayaks belongs association has to be increased for rental boats to tourists. The existing small boat-house on the shore of Plivsko Lake has to be expanded as Canoe/Kayak Center to cater the increasing boats and additional functions of boat repair and visitor office for rental boat etc. Deteriorated regatta course facilities has to be improved (buoy and anchoring, modern judging detector system, slip yard and pontoons) for international regatta in the future.

For Rafting product development, setting-up a variety of rafting course from beginner to high professional courses and define appropriate landing area.

For nature and eco activities in rich forest area, route setting and Forest Trail improvement (minor maintenance of existing trail, logging road, vacant courses of forest trolley) with resting / observation spot development and appropriate signage. Forest trail has to be designed to link potential resources and activities in the region except mine contamination fields.

(3) Marketing and Promotion

The existing summer content of Pliva Tourism on **the web site** "<u>www.plivatourism.ba</u>" should be improved and added the contents as follows:

- Adding and diverse language variation to the existing English and BiH local language
- Create seasonal contents of Eco-tourism Activities in the region;
- Yearly and monthly event contents with specialized or discounted tour packages;
- Photo contest; and
- Comment from customer.

Seasonal E-newsletter system to inform additionally developed and improved new products and programs should be established to cover major sport associations in focusing market countries and tourists, who came to Pliva region.

(4) Education and Training

The remaining training programs have to be organized to diversify variety of tourism products in this winter season.

- Herb / mushroom picking, - bird / nature watching, - mountain biking, - hunting, etc.

(5) Operation of Fishing

PSA has to continuously organize fishing events such as national, international and world wide fishing competitions to improve Pliva as well-known fishing destination in EU and world.

(6) Operation of Canoe and Kayaking

At the present, Canoe and Kayak associations are real sport men's club, their knowledge to operate canoe / kayak tourism business has to be trained and improved for appropriate level.

(7) Operation of Other Eco-Tourism Activities

Potential leading associations for eco-tourism activities in forest dose not have knowledge and sense to create and operate eco-tourism products at the present. The leaders of potential associations have to be trained and improved to appropriate level of business sense and specific knowledge and technique, etc.

(8) Safety and Rescue Operation

Safety and Rescue training programs have to apply for wider tourism related industries. With supporting Main Action Center (MAC), define land mine contamination area on map and disseminate these information to avoid incidence by mine.

Task	Achievement	Cost (KM)	Benefit	Things to do	Who and how
Preliminary Works	 A. Eco Pliva association was registered on June 2004 B. Pliva Sport Association (PSA) was registered on Sept. 2004 	1,200	A. Create mutual cooperation between 3 communities through board members from 3 municipalities	A. Re-registration on the state level	PSA, 3 municipality
Management and Accounting	 A. Organize Board of Director, B. Organize taskforce team 		A. Taskforce composed of real leaders of sport NGO	A. Diversify member from other eco & sports tour operation body (NGO)	PSA, 3 municipality
	 A. Built Pliva Sports Center, B. Purchase equipment for canoe / kayak, guide keeper, fly-fishing, fly making, fish hatchery, river cleaning boat, office equipment, C. Fish restocking (2 times) 	570 531	A. Over 80 daily tickets	 A. River cleaning by boat B. Utilize equipment for fly-fishing, renting canoe/kayak, workshops 	PSA
Marketing and Promotion	 A. FFF Europe in Slovenia, B. Lorimes fair in Banja Luke, C. Fly Fishing Competitions, D. Media presenting 		A. Good relation with fishing associations in Ex Yugo will create market for Pliva	 A. Diverse web site contents including other sport products, B. Up-date & Establish contact C. Organize frequent events 	PSA and Contracted web site developer
Training and Education	 A. Training tour in Slovenia, B. Training workshop of fly-fishing / watch keeper, C. Training workshop of canoe / kayak 	12,000	 A. Improved sense of hospitality industry /business, B. Improve skill on each field 	A. Diverse training program for mushrooms / herbs picking, bird / nature watching, etc	PSA, specialist and instructors
Operation on Fishing	 A. Contract with PCLA, B. Tour Packages prepared with Zepter Passport 		A. Prepare and sales of joint Fishing Tour Products with PCLA	A. Organize diverse event and international / world championships	PSA, 3 Fishing Associations

Task	Achievement	Cost (KM)	Benefit	Things to do	Who and how
Canoe and Kayak	 A. Cleaning of River (floating garbage collection) A. Establish Info desk 		 A. Clean river and riverside in summer season, B. Start to rent canoe / kayak 	 A. Improve business for rental boat & training, B. Improve boat-house and regatta facilities, C. Additional boat A. Develop diverse 	PSA and 2 Canoe / Kayak Associations PSA, sports
eco-tourism				tourism product B. Organize seasonal attractive event program	and eco tourism NGO
Safety and Rescue	 A. First aid / safety training in Banja Luka, B. Purchase / utilize first aid sets, walky-talky, mountain-bike 		 A. Improve skills and understandings of safety, B. Employ 2 watch keepers 	 A. Up-grade and increase more trained safe-guards for river and mountain sides, B. Make land-mine map with MAC 	PSA, all member associations and MAC

6.4.3 Key Lessons

Pliva Sport Activities pilot project is proposed as leading activities to create, promote, sell, and manage the proposing nature and eco-tourism products coordination with the responsible associations to operate tour programs. Entrepreneurship and challenging spirits essential in newly establishing eco-tourism business activities are needed to initiate and execute a proper new eco-tourism business with appropriate environmental conservation.

This winter season will be a chance to build confidence between local sports and eco-oriented associations and groups and together to train qualified services for offering tourism products and new products through workshops with to define the proudness local culture, life-style and nature.

Figure C 6.1 shows the locations related to the three pilot projects implemented in Pliva Area.

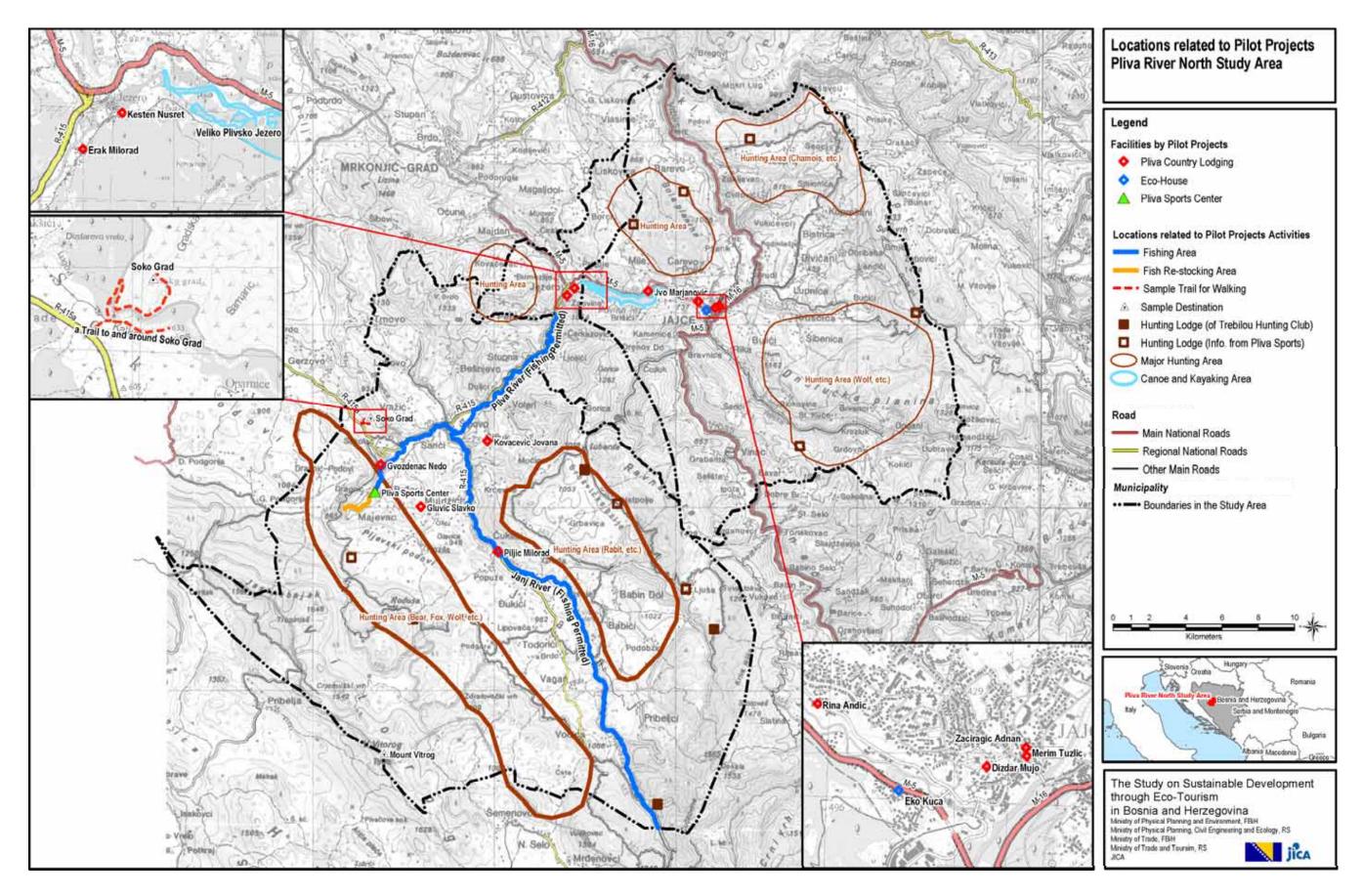


Figure C 6.1 Locations related to Pilot Projects Pliva River North Study Area