

**PROJECT INFORMATION DOCUMENT (PID)  
APPRAISAL STAGE**

Report No.: AB3854

<b>Project Name</b>	Disaster Risk Mitigation and Adaptation Project
<b>Region</b>	EUROPE AND CENTRAL ASIA
<b>Sector</b>	Flood protection (100%)
<b>Project ID</b>	P110845
<b>Borrower(s)</b>	ALBANIA
<b>Implementing Agency</b>	<p>Ministry of Interior Scanderbeg Square, No. 3, Tirana Albania Tel 355 42 228167 Fax 355 42 258625</p> <p>Alfred Olli, Director General of Civil Emergencies Directorate General Directory of Civil Emergencies Tel/fax 355 42 273191 email ollia@moi.gov.al</p>
<b>Environment Category</b>	<input type="checkbox"/> A <input type="checkbox"/> B <input checked="" type="checkbox"/> C <input type="checkbox"/> FI <input type="checkbox"/> TBD (to be determined)
<b>Date PID Prepared</b>	May 5, 2008
<b>Date of Appraisal Authorization</b>	May 2, 2008
<b>Date of Board Approval</b>	June 19, 2008

**1. Country and Sector Background**

Due to its location, Albania is vulnerable to regional hazards, such as earthquakes, flooding and wildfires. The proposed Albania Disaster Risk Mitigation and Adaptation Project (AL-DRMAP) has been developed as part of a regional disaster risk mitigation and adaptation program.

*Historic context for natural disasters.* In recent decades, the frequency of major natural disasters as well as losses caused by them, have increased significantly. The economic costs of major disasters in constant dollars are estimated to be 15 times higher than they were in 1950s, i.e. US\$652 billion in material losses in the 1990s.<sup>1</sup> In the past, disasters were considered natural events against which response was the only action that could be undertaken. Therefore, most of countries and organizations, including the World Bank group, focused their efforts on the emergency response. However, over the last decades, due to the increased impact of devastating catastrophes and better understanding of underlying causes and effects, the focus has slowly shifted from the disaster response to disaster risk reduction and climate change adaptation. This broader approach is aiming at reducing vulnerability of countries and communities to the impact of natural hazards and promoting adaptation to changes in climatic patterns.

<sup>1</sup> Source: IMF 2003 as cited in *Hazards of Nature, Risk to Development – An IEG Evaluation of World Bank Assistance to Natural Disasters*; World Bank 2006

*Vulnerability of South Eastern European (SEE) countries to natural disasters.* SEE is exposed to a variety of natural hazards, including floods, droughts, forest fires, earthquakes, and landslides. A recent hazard risk assessment carried out for 11 countries of SEE<sup>2</sup> examined, for each country, the occurrence of different perils such as earthquakes, floods, landslides, drought, extreme temperature, windstorms, wild fires, epidemics, and technological perils, and identified, except Moldova and Slovenia all the countries are prone to seven or more hazards.

This same study analyzed vulnerability of SEE countries based on the incidence rate of disasters, annual average number of deaths and exposed population, on average one flood strikes Romania and Turkey every year and the combined data on Serbia and Montenegro shows one flood event every two years. A substantial number of the population is exposed to earthquakes in Albania, Croatia, Macedonia, Romania, Slovenia and Turkey, while in most countries large number of population is at risk of floods. Data on population exposed to drought is available for few countries like Bosnia and Herzegovina, Bulgaria, Moldova and Romania and shows the risk as substantially high.

Disasters have a significant impact on the economic performance and may affect country macroeconomic situation. The most important macroeconomic effects are those that affect GDP, sectoral production, the current account balance, indebtedness and public finances.<sup>3</sup> Drought events have been most frequent in Bosnia and Herzegovina. Considerable economic losses due to drought have been recorded in Albania, Bosnia and Herzegovina, Croatia, Macedonia, Moldova and Romania.<sup>4</sup> With the expected temperature rises of 4-5°C throughout the Southern and South Eastern Europe, the yearly rainfall is expected to drop by up to 40 percent of current annual precipitation<sup>5</sup> and the frequency of droughts and economic damages caused by them could become only more pronounced.

*Economic and Financial Impacts of Disasters on SEE countries.* The increased intensity and severity of disasters will have significant impact on the countries' fiscal stability, households, as well as business.

- *Adverse impacts on countries' fiscal stability and macro-economic performance.* With the growing frequency and severity of disasters, it is becoming increasingly difficult to cover economic costs of such events from recurring budgets. Even though every SEE country makes annual budget appropriations for emergency expenditures, often the actual budgetary outlays on such events are well in excess of budgeted amounts.
- *Socio-economic implications on households.* The growing frequency and severity of weather-related events is likely to increase the financial vulnerability of many households in SEE countries. In the future, households are likely to experience more frequent and potentially severe damages to residential properties as well as loss of employment income due to business interruption. Given the current very low level of catastrophe insurance penetration in SEE countries, of the order of 1-3 percent, climate change is likely to take a considerable financial toll on the population of the region.

---

<sup>2</sup> EM-DAT *Synthesis Report on South Eastern Europe Countries Disaster Risk*; RMSI; 2007

<sup>3</sup> *Preventable Losses: Saving Lives and Property through Hazard Risk Management*; Christoph Pusch; World Bank 2004

<sup>4</sup> *Synthesis Report on South Eastern Europe Countries Disaster Risk*; RMSI; 2007

<sup>5</sup> *Adapting to Climate Change in Europe – Options for EU Action*; Commission of European Communities; 2007

- *Adverse economic effects on business.* Marked increases in losses from property damage and lost revenue due to business interruption caused by extreme events translate into the increased volatility of earnings in the sectors exposed to weather. These include utilities, tourism, agriculture, transportation, aviation, and forestry. In turn, the increased volatility of earnings means a higher cost of capital for businesses operating in the region.

*Regional SEE-DRMAP.* The World Bank together with the United Nations International Strategy has developed the Disaster Risk Mitigation and Adaptation Program for SEE countries for Disaster Reduction (UN ISDR). This program is supported by the Global Facility for Disaster Reduction and Recovery (GFDRR), established with multiple donors and partners, (notable UN ISDR), to reduce vulnerability to disasters in accordance with the Hyogo Framework for Action.

*Disaster risk reduction and adaptation framework.* Although SEE countries have recognized the importance of disaster risk reduction, most of them do not have a comprehensive disaster risk reduction and adaptation strategy. The proposed program framework will provide support to the development and financing of country specific strategies based on agreed methodology and processes. The disaster risk reduction and adaptation framework identifies the following set of activities aimed at reducing the impact of disasters on the region over the coming years.

*Disaster preparedness.* Countries in the region need to develop their own local capacity for disaster response and to strengthen regional cooperation in weather forecasting, flood early warning systems, forest fire fighting, civil protection, and emergency management information and communications systems. Close cooperation will enable SEE countries to share information and to help each other respond to large-scale disasters. Activities in disaster preparedness need to consider the broad EU goal to harmonize civil protection equipment and response procedures to ensure efficient cross border cooperation in case of disasters.

*Disaster risk insurance and hedging instruments.* SEE countries need to develop catastrophe risk financing and weather risk hedging instruments to reduce the financial vulnerability of governments, businesses, and households to the adverse impacts of geo-hazards and climate change through development of market-based risk transfer mechanisms.

*Disaster mitigation and adaptation.* The region needs to invest in the protection of vital infrastructure to withstand key hazard risks, taking into account the increased vulnerability resulting from the climate change. Disaster mitigation could include flood control, retrofitting of buildings, bridges, lifelines and other key infrastructure to resist seismic shocks. Since not all risks can be mitigated, adaptation becomes essential to ensure that development activities take into consideration the changes in weather conditions in the region. The adaptation measures include changes in agriculture practices, revisions of building codes and land use plans, water resources management, education, health, and power sector, etc.

*Contingency Facility (Deferred Drawdown Option).* A regional contingency facility, the Catastrophe Risk Draw Down Option (Cat DDO) will provide the pre-approved funding that could be withdrawn quickly in case of a natural disaster and upon meeting predefined triggers. This pre-approved funding could be withdrawn by the governments to address the country's

immediate liquidity needs in the aftermath of a disaster and provide a financial support for catastrophe financing schemes.

*Country Issues.* Albania is vulnerable to a number of man-made<sup>6</sup> and natural disaster risks such as earthquakes, floods and drought. Compounded with the lack of catastrophe insurance, these risks can have devastating effects on Albania's population, its economy and its growth prospects. Albania has one of the highest seismicity ratings in Europe. Considering that buildings in Albania are not built to acceptable construction standards, the impacts of earthquakes on the built environment is of major concern. Following the demilitarization of the emergency response function, the Government has initiated changes in disaster risk management through revisions of the institutional set-up and planning process. However, an initial overview determined that both organizational and technical capacities to respond effectively to emergencies remain low. Weather forecasting is intrinsically difficult, as precipitation is naturally highly variable and Albania's topography enables floods to develop rapidly. The Albanian economy is sensitive to weather conditions, given the importance of agriculture, hydropower, fisheries, and tourism.

Albania's capacity to forecast weather is currently constrained by the deteriorated state of the national weather and hydrological monitoring network and by deficient telecoms capacity to collect inputs needed for daily forecasting. Nevertheless, Albania continues to have some fundamental assets: weather forecasting teams with strong scientific backgrounds, able to make good use of a modernized network and rapidly assimilate new techniques, and long-term historical climate records in some areas that will support high-quality climatological services.

Significant disaster reduction can be achieved through strengthened capacity to deliver risk management services, including: (a) comprehensive disaster mitigation and response plans, (b) operational emergency response equipment, (c) integrated emergency communications, (d) accurate and longer-lead-time forecasting of severe weather, (e) hydrological forecasts prepared daily on the basis of near-real-time data, (f) fire weather indices to support forestry management, (g) soil moisture monitoring, (h) public and accurate forecasts of marine weather, (i) air and water pollutant dispersion models, (j) enforcement of improved building codes, and (k) precipitation and temperature climatology and updated indices to enable financial weather risk hedging. This strengthening of capacity would have benefits extending beyond national interests. Since certain types of hazard are regional in nature, coordination and cooperation with neighboring countries would improve information availability and support reduction of the impact of natural and man-made disasters.

## 2. Objectives

The AL-DRMAP is the initial project of the broader regional South Eastern Europe Disaster Risk Mitigation and Adaptation Program (SEE-DRMAP) framework. The AL-DRMAP's overall objective is to reduce Albania's vulnerability to natural and man-made hazards and to limit

---

<sup>6</sup> United Nations Office for the Coordination of Humanitarian Affairs (OCHA) Situation Report 3 – Albania Munition Depot Explosion – 26 March 2008.  
[http://www.reliefweb.int/rw/rwb.nsf/retrieveattachments?openagent&docid=03EF521771112533492574190003D730&file=Full\\_Report.pdf](http://www.reliefweb.int/rw/rwb.nsf/retrieveattachments?openagent&docid=03EF521771112533492574190003D730&file=Full_Report.pdf)

human, economic, and financial losses, due to disasters through implementation of Albania's disaster risk mitigation program.

The AL-DRMAP comprises two phases. The first phase is designed to consolidate and upgrade Albania's capacity to plan for, mitigate and respond to disasters. This phase will provide financing for soft (non-structural) measures consisting of activities and investments that will build Government capacity to effectively respond to natural and man-made disasters. The second phase will be triggered by achievement of Phase I activities, specifically the development and approval of a comprehensive countrywide disaster risk reduction and adaptation strategy which defines priority actions and an investment program to be funded in the second phase. Specific triggers for the APL second-phase are:

- ③ A Disaster Risk Mitigation Strategy and Investment Program approved by the Government;
- ③ Effective publication of data on public website of data gathered with the support of project financing, including digitized climate data; and
- ③ Government implementation of an institutional arrangement, with clearly defined roles and responsibilities, that facilitates coordination of the three public agencies officially involved in weather monitoring tasks.

The second phase of the APL will extend financing to other activities and include mitigation measures further strengthening, and reinforcing disaster risk management and the emergency response capacities. The second phase is estimated to cost US\$40 million to be provided as an IBRD loan. The exact amount will be determined during the first phase once the priority investment program is defined. Therefore, the total cost of the APL will be on the order of US\$50 million.

### 3. Rationale for Bank Involvement

The World Bank has long been engaged in assisting countries to recover from catastrophes and to reduce vulnerability to hazards, primarily natural. From 1984 to 2006, for example, the Bank financed 528 projects that addressed natural disasters, comprising more than US\$26 billion in lending.<sup>7</sup> Traditionally, reconstruction assistance has been provided in the aftermath of disasters. However, in recent years, the Bank has shifted its focus toward support for disaster preparedness and mitigation, and catastrophe risk financing. Over time, the Bank has developed specialized expertise and knowledge in the area of hazard risk management. Some key policy tools and knowledge products have been developed by the Bank in partnership with other organizations, including post-disaster damage and needs assessment, hazard and vulnerability assessment, and risk-transfer instruments, among others. Increasingly, in response to requests from client countries, the Bank has shifted its focus to supporting disaster risk mitigation operations.

The Bank has prepared a regional South Eastern Europe Disaster Risk Mitigation and Adaptation Program (SEE-DRMAP) framework, of which the Albania Disaster Risk Mitigation and Adaptation project (AL-DRMAP) is the first project. In the Europe and Central Asia (ECA) region, there has been an increased recognition of the importance of the proactive measures for

---

<sup>7</sup> *Hazards of Nature, Risks to Development – An IEG Evaluation of World Bank Assistance for Natural Disasters*; Independent Evaluation Group (IEG), World Bank, 2006

disaster preparedness and risk management. The Bank has supported several programs in disaster risk reduction; the proposed regional SEE-DRMAP together with “vertical” operations, such as the proposed AL-DRMAP, will advance the region’s disaster risk management and adaptation agenda based on the experience gained in ECA and other regions. As part of the regional SEE-DRMAP, this project is a first phase Adaptable Program Lending (APL), to ensure that Albania is accompanied and supported regionally in its disaster risk mitigation and adaptation work.

#### 4. Description

The proposed project will include the following components and activities.

*Component 1: Disaster Risk Management and Preparedness (US\$4.89 million).* The component objective is to support capacity building for emergency response mechanism through provision of necessary equipment, and strengthening disaster risk mitigation planning. The sub-component activities include:

*Sub-Component 1.1 Strengthening Disaster Risk Mitigation Planning and Emergency Management.*

- a) Review and update the emergency response legislative framework;
- b) Develop national disaster risk management strategy and investment program
- c) Prepare and implement a public awareness and education program;

*Sub-component 1.2 Enhancement of Emergency Response Capacity*

- d) Procure emergency response equipment
- e) Strengthen existing emergency operations center
- f) Prepare feasibility studies for establishment of 112 system and emergency communications system;
- g) Develop emergency response procedures; and
- h) Prepare and implement exercises and training for first responders.

*Component 2: Strengthening of Hydro-meteorological Services (US\$2.09 million).* The component objective is to support disaster risk reduction through provision of accurate hydro-meteorological forecasts and services tailored to the needs of disaster risk managers in weather-sensitive sectors. The component activities include: a) increasing data accessibility; b) upgrading the weather forecasting monitoring network; and c) developing capacity to prepare weather forecasting products tailored to disaster management. Indicators would include provision of medium-term weather forecasts to the public; measurement and publication of the accuracy and resolution of public forecasts; availability of climate data; Albania meeting World Meteorological Organization (WMO) standards for support of the global daily forecasting effort; data sharing with other national meteorological and hydrological services in South Eastern Europe via public website; and initiation of user dialogue within Albania to the enhance value of risk reduction information products.

*Component 3: Development of Building Codes (US\$0.36 million).* The component objective is to reduce risks from seismic activities through development of improved building codes and

mechanisms for introduction of improved standards. The component activities include: (a) development of a national building code; (b) train engineers in new design standards; and (c) developing a mechanism for licensing of engineers.

*Component 4: Catastrophe Insurance (US\$2.65 million).* The component objective is provide access to private catastrophe risk insurance to households and small and medium enterprises (SMEs). This will be done through establishment of a Catastrophe Risk Insurance Facility for South Eastern Europe (SEE CRIF, or Facility), within the SEE DRMAP framework, of which Albania will be a shareholder and member. Component activities include: (a) a one-off equity contribution to the shareholders' capital of SEE CRIF for Albania to join the insurance pool; and (b) establishment of SEE CRIF's presence in Albania through provision of its insurance products to the local market; adoption of necessary policy frameworks and investment in public risk awareness and education about catastrophe insurance.

*Component 5: Project Management (US\$0.19 million).* The component will finance some project management costs, such as procurement and financial management consultants, monitoring and evaluation activities, incremental operating costs of managing the project and project reporting and audits.

## 5. Financing

Source:	(\$m.)
BORROWER/RECIPIENT	1.01
International Development Association (IDA)	6.16
International Bank for Reconstruction and Development (IBRD)	3.02
Total	10.19

## 6. Implementation

Project implementation will be streamlined within the structures of four key Government agencies, which will carry out activities under the components falling under their respective mandates. The Ministry of Interior (MOI) will be the lead implementation agency for the project as the key entity responsible for disaster management in the Government of Albania.

The Project Management Team (PMT) will manage the overall project within the MOI. The PMT consists of staff assigned from within the General Directorate of Civil Emergencies (GDCE), and is assisted by contracted experts. The IEWE, under the Ministry of Education and Science, and the Ministry of Public Works, Transport and Telecommunication (MOPWTT) will also assign within their agencies Implementation Team Coordinators, as part of the agency implementation teams, who will coordinate the activities of their agencies with the PMT. While the PMT will be responsible for the procurement, financial management and monitoring of the project, the respective implementation teams within the IEWE (for Component 2), the MOPWTT (for Component 3), and Ministry of Finance (MOF) (for Component 4) will contribute to the substantive elements of their respective components' implementation. The Project Steering Committee (PSC) will have project oversight.

To support the PMT, a time-bound action plan was developed to provide additional fiduciary safeguards. Successful implementation of the action plan would especially strengthen mechanisms for third party assurance on the use of project resources.

## 7. Sustainability

*Institutional sustainability.* The commitment to the project objectives is a good indicator of its sustainability. Borrower ownership was confirmed during project preparation, responsible entities worked on developing project components and activities, and providing all necessary counterpart inputs with great efficiency.

An assurance of institutional sustainability is provided through the assistance to developing the organizational and legal framework for disaster risk management in Albania, as well as to formulating and testing operational procedures to strengthen the capacity of the emergency intervention units to effectively carry out the roles assigned to them.

*Technical sustainability.* The long-term sustainability of the hydromet equipment, as well as the response tool, is dependent upon continuing budgetary support from the Government to maintain the systems and equipment. Since weather monitoring and forecasting equipment and response equipment are used on a daily basis, breakdowns will be immediately noticeable. Future investments in the APL's second phase will depend on adequate maintenance of existing and project-financed equipment.

## 8. Lessons Learned from Past Operations in the Country/Sector

*Focus on ex-ante disaster risk reduction measures.* The importance of risk reduction efforts has been acknowledged by the international community in the Millennium Declaration, and the UN ISDR Hyogo Framework for Action 2005-2015. Hazard mitigation efforts are far more cost-effective than reliance on post-disaster actions and recovery. While the estimates and analyses vary, typically, the benefits on the mitigation investments are 5-7 times higher than the costs. The project will support key pillars and elements for a disaster risk mitigation program.

*Comprehensive and strategic approach to disaster risk management.* Addressing disaster risks and building resilience can be achieved by strengthening a country's capabilities to manage and reduce risk of all hazards. The proposed operation supports an integrated-multi-hazard disaster risk reduction approach, which addresses the main disaster risks to which Albania is prone. Common elements of an effective disaster risk management strategy include institutional and legal frameworks, emergency response services, emergency communication tools and systems or emergency management information system, all which are part of the project.

*Programmatic regional approach is more effective than individual country approaches.* In case of many countries, due to their geographical characteristics, the success in forecasting and responding to disaster depends on regional cooperation. Weather forecasting has significantly improved in the past decades, and optimal benefits depend upon sharing of data and capacity

among countries. No country can successfully forecast national weather disasters without participation in this global exchange. Accordingly, this project will enable Albania to exchange data and information according to the standards of the World Meteorological Organization.

*Technically high-quality forecasts may have no value because they are not disseminated or not understood.* Accordingly, this project will undertake regular surveys of key user groups to determine if they have received alerts of dangerous weather and if the forecasts were useful.

*Hydromet investments may fail for lack of agency budget to cover operations and maintenance after the initial phase.* Development partners in the hydrometeorology sector have noted the problem of deterioration of hydromet infrastructure if operations and maintenance costs, estimated at 15 to 20 percent annually of capital costs, are not factored in and expended. The phasing and APL design of this project enables a limitation of risk: if the International Institution for Water and Energy’s (IEWE) budget does not rise to cover the operation and maintenance costs of new equipment, then subsequent investments would not be undertaken.

## 9. Safeguard Policies (including public consultation)

<b>Safeguard Policies Triggered by the Project</b>	Yes	No
<a href="#">Environmental Assessment (OP/BP 4.01)</a>	[ ]	[x]
Natural Habitats ( <a href="#">OP/BP 4.04</a> )	[ ]	[x]
Pest Management ( <a href="#">OP 4.09</a> )	[ ]	[x]
Physical Cultural Resources ( <a href="#">OP/BP 4.11</a> )	[ ]	[x]
Involuntary Resettlement ( <a href="#">OP/BP 4.12</a> )	[ ]	[x]
Indigenous Peoples ( <a href="#">OP/BP 4.10</a> )	[ ]	[x]
Forests ( <a href="#">OP/BP 4.36</a> )	[ ]	[x]
Safety of Dams ( <a href="#">OP/BP 4.37</a> )	[ ]	[x]
Projects in Disputed Areas ( <a href="#">OP/BP 7.60</a> )*	[ ]	[x]
Projects on International Waterways ( <a href="#">OP/BP 7.50</a> )	[ ]	[x]

While the project does not trigger the Bank Safeguard Policies, Terms of References for technical assistance support by the loan will include provisions that any advice provided will be consistent with Bank safeguard policies.

## 10. List of Factual Technical Documents

- “South Eastern Europe Disaster Risk Mitigation and Adaptation Program”; World Bank/UN ISDR; March 2008
- “Mitigating the Adverse Financial Effects of Natural Hazards on the Economies of South Eastern Europe”; World Bank/UN ISDR; March 2008

\* By supporting the proposed project, the Bank does not intend to prejudice the final determination of the parties’ claims on the disputed areas

- “South Eastern Europe Disaster Risk Mitigation and Adaptation Initiative – Risk Assessment for South Eastern Europe”; World Bank/UN ISDR; March 2008
- “Study Report – Local Vulnerability and Capacity Assessment in Albania” UNDP Albania; Albania Red Cross; DFID; October 2004
- “Disaster Risk Assessment in Albania”; UNDP; October 2003
- “National Civil Emergency Plan of Albania”; Republic of Albania; Ministry of Local Government and Decentralization; December 2004

11. Contact point

Contact: Alison C. N. Cave

Title: Senior Urban Planner

Tel: (202) 473-3952

Fax:

Email: [Acave@worldbank.org](mailto:Acave@worldbank.org)

12. For more information contact:

The InfoShop

The World Bank

1818 H Street, NW

Washington, D.C. 20433

Telephone: (202) 458-4500

Fax: (202) 522-1500

Email: [pic@worldbank.org](mailto:pic@worldbank.org)

Web: <http://www.worldbank.org/infoshop>