



Report Number: ICRR0022818

## 1. Operation Information

**Operation ID**

P157489

**Operation Name**

Disaster Risk Management DPL-CAT DDO

**Country**

Serbia

**Practice Area (Lead)**

Urban, Resilience and Land

**Non-Programmatic DPF**
**L/C/TF Number(s)**

IBRD-87380,TF-A2296,TF-A4344,TF-A7621

**Closing Date (Original)**

31-Oct-2020

**Total Financing (USD)**

81,244,201.51

**Bank Approval Date**

03-May-2017

**Closing Date (Actual)**

31-Oct-2020

**IBRD/IDA (USD)**
**Co-financing (USD)**

Original Commitment

70,000,000.00

6,278,457.39

Revised Commitment

76,467,986.13

6,255,825.51

Actual

81,244,201.51

6,339,221.96

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## 2. Program Objectives and Pillars/Policy Areas

### a. Objectives

The Program Development Objective (PDO) of this Development Policy Operation (DPO) as stated in the Program Document (PD, page i):



**" To strengthen Serbia's institutional and legal framework to effectively manage the physical and fiscal impact of natural hazards".**

For the purpose of this evaluation, the individual objectives of this DPO are identified as follows:

PDO 1. Strengthening the institutional and legal framework to effectively manage the physical impact of natural hazards.

PDO 2. Strengthening the institutional and legal framework to effectively manage the fiscal impact of natural hazards.

**b. Pillars/Policy Areas**

The PDOs were to be achieved through reforms under three policy areas/pillars (PD, page i).

Pillar 1. Strengthening Serbia's legal and institutional framework for post-disaster reconstruction and disaster and climate risk management.

Pillar 2. Strengthening Serbia's technical capacity for planning and implementing disaster and climate risk management activities.

Pillar 3. Reducing the fiscal impact and strengthening the Borrower's financial capacity to respond to the adverse impact of natural hazards, particularly those exacerbated by climate change.

**c. Comments on Program Cost, Financing and Dates**

**Financing.** An IBRD loan of US\$70.0 million financed this DPO with a Catastrophe Deferred Drawdown Operation (CAT- DDO). In addition, there was financing from three Trust Funds (TFs): US\$1.0 million (TF - A4344); US\$4.3 million (TF -A2296); and US\$1.0 million (TF- A7621). With this, the Bank financing for this operation was US\$76.4 million. The amount disbursed was US\$81.2 million. According to the clarifications provided by the team, the difference between the appraisal estimate and amount disbursed was the loan was disbursed in EUR.

**Dates.** The Bank approved the operation on May 3, 2017, and it became effective on January 29, 2018. The operation closed as scheduled on October 31, 2020.

**3. Relevance of Design**

**a. Relevance of Objectives**

**Country context.** Serbia is vulnerable to natural hazards, especially weather-related ones. This operation was prepared in the wake of the floods of May 2014, which caused significant damages and losses amounting to 4.8% of the Gross Domestic Product (GDP). The disaster disproportionately affected the poor, with estimates showing 125,000 people pushed into poverty, a 7% increase over the previous years' poverty headcount. Serbia was also sensitive to future climate and precipitation change, with weather-related



events expected to become more frequent. Having a Disaster Risk Management Strategy (DRM), and contingent financing to secure access to immediate liquidity to meet recovery needs following a natural hazard was important in the country context.

**Government strategy.** In the years before appraisal, the Government started adopting measures for moving towards a proactive DRM approach to disasters (as opposed to an emergency-driven reactive approach). The Government adopted the *National Disaster Risk Management Program* (hereafter NDRMP) in December 2014, identifying DRM as a national priority and approved a National Action Plan in 2017 for implementing the NDRMP. The Government also enacted legislation to strengthen the legal framework to better manage disasters such as the: (i) The Law on Emergency Situations (2009) mandating multi-hazard vulnerability assessments at national and municipal levels; and (ii) The Law on Amendments to the Emergency Situations (2011) introducing the concept of risk assessments.

As a potential candidate country for European Union (EU) membership, Serbia also made efforts to align its legal framework with EU regulations on DRM. For instance, Serbia's Law on Water (2010) was consistent with the EU Water Framework Directive (EU WFD), and with EU Flood Directive (EFD) that required EU member states to establish flood risk management plans for river basin districts. Serbia also adopted the Law on Meteorological and Hydrological activity (2010) which provided the legal framework for weather forecasting, early warning, weather and climate related information for risk assessments and integrated strategic priorities of the World Meteorological Organization (WMO).

**Bank strategy.** The Bank financing for this operation, intended to provide Serbia with a fiscal buffer for: (i) reducing the impact of future disasters on its fiscal balance; (ii) providing bridge financing for immediate response, which was an appropriate use of Bank resources, since disasters disproportionately impacts the poor; and (iii) ensuring that budget resources are not diverted from other development programs. The PDOs were well-aligned with the Bank's Country Partnership Framework (CPF) for 2016-2020. The CPF recognized that making Serbia's economy more climate resilient was an important part of the country's development agenda. DRM was integrated in the CPF as an inherent part of the policy coordination and rationalization agenda (objective 1b: creating a more effective public administration and improving service delivery), and mitigating financial risk through the Catastrophic Risk Insurance Facility (objective 2b: creating a more stable and accessible financial sector). The Bank's CPF for 2022 - 2026 which is currently being finalized, prioritizes more resilient growth as one of the two higher level objectives and emphasizes the objective of transitioning to a climate resilient and environmentally sustainable economy.

**Previous Bank experience.** The World Bank has a long partnership with the Government to build Serbia's resilience to DRM. The Bank provided financial and technical support for a Recovery Needs Assessment following the 2014 floods. Subsequently, the Bank provided technical assistance for implementing the NDRMP (such as, building institutional capacity for risk reduction investments, emergency preparedness, improving early warning systems, and developing risk financing solutions). When this operation was prepared, the Bank was financing two ongoing operations: (i) a flood emergency recovery operation for supporting sectors most affected by floods; and (ii) the West Balkans Drina River Management Project for improving the capacities of Bosnia, Serbia and Montenegro to manage the transboundary Drina River Basin. The Bank is also supporting the development of Serbia's catastrophe insurance market through the South East Europe and Caucasus Catastrophic Risk Insurance Facility (SEEC CRIF).

The Bank team determined that the macroeconomic situation to be robust at appraisal, given the stronger macro and fiscal development and the strong global demand for emerging market debt at that time. When this operation was prepared, Serbia had a new three-year of SDR 935.4 million Stand-By-Arrangement (SBA) with



the International Monetary Fund (IMF). The prior actions of this operation were based on sound analytical underpinnings (discussed below).

## **b. Relevance of Prior Actions**

### **Rationale**

**Pillar 1. Strengthening the Borrower's legal and institutional framework for post-disaster reconstruction and disaster and climate risk management.** Reforms in this pillar provided the legal and the institutional framework for improving the operational capabilities of the newly designated government entities to develop disaster-related policies.

**Prior Action 1.** The Government adopted the Law on Reconstruction operationalizing the Public Investment Management Office (PIMO), and formulated legislation for establishing the Sector of Emergency Management (SEM) in the Ministry of Interior (Mol) as the dedicated national coordinating entity for DRM issues.

As Serbia lacked an adequate system for responding to the 2014 floods, the Government established the Office for Flood Affected Areas Assistance and Rehabilitation (FAARO) as a temporary national entity for managing reconstruction activities. During a period of 18 months, FAARO proved to be effective in providing financial assistance to families, small and medium-sized enterprises and farmers, improving flood protection infrastructure at over 300 sites, and restoring the electric system in affected areas. The Government instituted the PIMO as the legal successor to FAARO and thereby transformed an ad hoc structure into a permanent institution with a mandate to manage reconstruction activities.

Although the PIMO was relatively new when this operation was prepared, it was proactively managing tasks well beyond its mandate (such as formulating the National Disaster Risk Management Plan). To ensure that the PIMO focused on its mandate, the Government formulated legislation for establishing the Sector of Emergency Management (SEM), as the first dedicated coordinating entity for addressing DRM policies.

The analytical underpinnings for this prior action were based on: (i) The Government's 2014 Report (*Serbia; Floods: Rapid Needs Assessment*); (ii) The World Bank 2015 Report (*Resilient Recovery: An Imperative for Sustainable Development*) that identified the challenges in planning and implementing post-disaster recovery; (iii) The European Commission 2015 Report (*Guidance for Recording and Sharing Disaster Damage and Loss Data*) that provided guidance on evidence-based DRM policies.

In view of the strong analytical work that formed the basis for the Prior Action, as well as the Government's demonstrated effort to enable PIMO through legislation to manage its challenging tasks, this PA 1 directly supports Pillar 1 in strengthening the Government's legal and institutional framework for DRM. The relevance of PA1 is rated as satisfactory.

**Pillar 2. Strengthening the Borrower's technical capacity for planning and implementing disaster and climate risk management activities.** Reforms in this pillar aimed to implement the National Disaster Risk Management Plan.

**Prior Action 2.** The Government adopted the National Disaster Management Action Plan that prioritized the activities to be implemented under the NDRMP program. Specifically the reforms aimed at improving



mechanisms for collecting flood risk and disaster damage information and sharing hazard risk information across agencies.

**Flood risk Information.** Information on flood risks was required for Serbia's compliance with the EU Flood Directive. Between 2010 and 2012, the Directorate for Water of the Ministry of Agriculture, Forestry and Water Management conducted flood risk assessment on 24 flood-prone areas with EU support. This Prior Action sought to collect this information on the remaining 75 flood prone areas in Serbia.

**Disaster damage and loss data.** At appraisal, Serbia lacked standards for collecting data on disaster damage and loss data. To address this gap, the Government supported local self governments in using a standardized data collection methodology recommended by the post Disaster Damage and Needs Assessment (PDNA). Following the 2014 floods, the Government applied this methodology for the first time for quantifying disaster damages, and trained key government stakeholders at the national and local levels on using this methodology. This Prior Action aimed to collect this information and build the technical capacity of the relevant stakeholders on applying this methodology.

**Sharing hazard and risk information.** At appraisal, Serbia did not have adequate mechanisms for sharing hazard and risk information. There was no central information portal and sharing of spatial data was cumbersome and resource intensive. The Government enacted the Law on State Survey and Cadaster, establishing the Serbia National Spatial Data Infrastructure (NSDI) as a single platform for accessing this information. The NSDI developed a metadata profile that was aligned with the EU INSPIRE Directive and ensured that all hazard risk information followed the same standard and format.

The analytical underpinnings for this prior action were sound and based on: (i) *The World Development Report* of 2014, that provided an analytical framework for managing disaster risks; (ii) The World Bank 2012. *The Sendai Report: Managing Disasters for a Resilient Future*. This report identified the priorities to be followed in the aftermath of natural disasters; (iii) The World Bank 2010. *Natural Hazards, Unnatural Disasters: The Economics of Effective Prevention*. This report identified the kinds of preventive actions that governments could take in the wake of disasters; and (iv) World Bank (forthcoming) *Serbia Open Data for Resilience Needs*, for information on data sharing and open data practices relating to DRM.

The data and information collection, risk and hazard information sharing, and strong analytical underpinning of PA2 are directly relevant in supporting the achievement of Pillar 2. The relevance of PA2 is rated satisfactory.

**Pillar 3. Reducing the fiscal impact and strengthening the Borrower's financial capacity to respond to the adverse impact of natural hazards, particularly those exacerbated by climate change.** Reforms in this pillar aimed to implement a Disaster Risk Financing Program (DRFP).

**Prior Action 3.** The National Cabinet adopted legislation on a Disaster Risk Finance Program (DRFP) for implementing financial protection measures for responding to disasters. Specifically the reforms aimed to maintain fiscal health at the national level for supporting longer term reconstruction needs and , develop sustainable disaster financing mechanisms for local self governments.

At appraisal, due to the ongoing fiscal consolidation efforts, the Government did not have adequate fiscal space for meeting contingencies in the wake of disasters. This necessitated the Government to rely on ex post and hoc mechanisms to cover the recovery expenses.

This prior action sought to establish a fiscal risk unit within the Ministry of Finance as a centralized authority for managing fiscal risks (including those due to natural disasters) and overseeing the implementation of the



DRFP. The program set priorities for the Government to become a proactive financial risk manager as opposed to being an emergency borrower. The CAT-DDO was a key step to fill the financing gap. Given that local self-governments bear significant disaster costs, the PIDO was to incentivize the local self governments to develop budgetary protection instruments.

The analytical underpinnings of this prior action were: (i) The World Bank 2014. *Financial Protection against Natural Disasters: An Operational Framework for Disaster Risk Financing and insurance*; (ii) World Bank 2016: *Serbia Country Diagnostic*. This report provided an overview of disaster risk financing in Serbia and identified challenges, including post-disaster funding gap and lack of proactive financing measures; and (iv) World Bank 2017. *Establishing a Fiscal Risk Management Department in the Ministry of Finance of Serbia*. This technical assistance project reviewed the current fiscal risk management practices in Serbia and outlined options for establishing a dedicated unit to centralize such functions.

The strong analytical work, the adoption of requisite legislation and the establishment of a fiscal risk unit directly strengthens the Borrower's financial capacity for DRM and helps reduce its fiscal impact. Hence, the relevance of PA3 to pillar 3 is rated as satisfactory.

The prior actions were appropriate along the results chain for realizing the intended objectives. Assigning equal value to each Prior Action, the simple average of the three Prior Actions is five. Therefore, the relevance of design is rated as satisfactory.

## Rating

Satisfactory

## 4. Relevance of Results Indicators

### Rationale

**Pillar 1. Strengthening the Borrower's legal and institutional framework for post-disaster reconstruction and disaster and climate risk management.** There were two Results Indicators (RIs).

RI # 1. The Government adopts the Systemization Act in 2015 and establishes the Office of Public Information Management Agency (PIMO) as a permanent agency for responding to recovery needs. The act specified the staffing of the PIMO and their responsibilities. The PIMO was required to submit annual reports to the Cabinet on post-disaster damage and needs assessments, the amount of post-disaster assistance, and the number of beneficiaries. The PIMO was required to submit annual reports, irrespective of whether there was a disaster or not. This indicator, which is verifiable, is a good step for ensuring PIMO's transparency. The RI is a direct measure of the Pillar's institutional strengthening goals. Therefore, the relevance of this indicator is satisfactory.

RI # 2. The Government adopts the Systemization Act and establishes the Sector for Emergency Management (SEM) in the Ministry of Interior, as the dedicated agency for implementing the Law on Natural and other Hazard Risk Reduction and Emergency Management. While the PIMO was to respond to recovery needs, SEM was responsible for implementing the National Disaster Risk Management Plan.





This indicator could be verified and directly signals legal and institutional strengthening. Therefore, the relevance of this indicator is satisfactory.

**Pillar 2. Strengthening Serbia's technical capacity for planning and implementing disaster and climate risk management activities.** There were three RIs.

RI # 3. This indicator specified the number of probabilistic national flood risk assessments that were to be completed when the operation closed. Given that information on national flood risks is required for planning for disaster and climate risk management activities, this indicator was a direct measure of the Pillar's achievement and could be measured. Therefore, the relevance of this indicator is satisfactory.

RI # 5. This indicator measured the number of sectors and local self-governments applying the post-disaster loss and needs assessment methodology for quantifying the disaster damage and loss data. As data on disaster damages and losses is required for reporting on disaster risk reduction targets, this indicator is a direct measure of the Pillar's achievement and could be measured. Therefore, the relevance of this indicator is satisfactory.

RI # 6. This indicator measured the number of sectors and institutions using an open-source geospatial platform with risk information. Given that there was no central information portal for this kind of information and the existing mechanism for sharing spatial data was cumbersome, this indicator was a direct measure of the Pillar's achievement. Therefore, the relevance of this indicator is satisfactory.

**Pillar 3. Reducing the fiscal impact and strengthening the Borrower's financial capacity to respond to the adverse impact of natural hazards, particularly those exacerbated by climate change.** There were three results indicators.

RI # 7. The Government enacted legislation for establishing the fiscal risk unit, in the Ministry of Finance, tasked with the responsibilities for implementing the national disaster risk financing program, and adopting instruments such as the CAT - DDO instrument to fill the current financing gap for disasters. This program would enable the Government to become a proactive financial risk manager. This indicator directly supports the achievement of the pillar and could be verified. Therefore, the relevance of this indicator is satisfactory.

RI # 8. This indicator measured the number of local self-governments preparing Disaster Financing Plans, that set out their current funding mix for natural disasters, and their strategy for securing funds when faced with disaster shocks. While preparing plans help, they may not be implemented by local self-governments unless they were mandated by law to do so. Therefore the relevance of this indicator is moderately unsatisfactory.

RI # 9. This indicator required the fiscal risk unit to submit annually historical post-disaster information to the Budget Department. This indicator was a direct measure of the Pillar's achievement and could be verified. Therefore, the relevance of this indicator is satisfactory.

Out of the nine results indicators, eight indicators were direct measures of the Pillar's achievement and appropriate. Therefore, the overall relevance of the results indicators is satisfactory.

**Table. Results Indicators (RIs), the Prior Actions (PAs) they support, baseline values, target values, actual change in RI relative to target and RI achievement rating.**



RIs	Associate d PAs	RI relevanc e	Baseline (including units and dates)	Target (including units and dates)	Actual value as of target date	Actual change in RI relative to targeted change	RI achievemen t rating
<b>PDO 1. Strengthening the institutional and legal framework to effectively manage the impact of natural hazards.</b>							
RI # 1. The PIMO is operational with staff and submits annual reports to the Cabinet.	PA1	S	Baseline (2017):0	PIMO is operational with staff and submits annual reports to the cabinet.	PIMO submits annual reports in 2017, 2018 and 2019.	The PIMO increased its staffing from 42 in 2017 to 73 in 2021.	S
RI # 2. The Government adopts the Systemization Act and establishes the Sector on Emergency management.	PA1	S	Baseline (2017): 0 Law not adopted.	Law adopted (2018).	Sector on Emergency Management established.	Sector on Emergency Management functional with additional responsibilities.	S
<b>PDO 2. Strengthening the institutional and legal framework to effectively manage the physical impact of natural disasters.</b>							
RI # 3. Number of National flood risk assessments Completed.	PA 2	S	Baseline (2017): 0	Target (2020):75	75	Target value realized.	S





RI # 4. The number of sectors and local-self-governments applying the PDNA methodology.	PA 2	Baseline: (2017): 0	Target: (2020): Three sectors and 15% of local self-governments	19% of local self-governments developed PDNA reports covering five sectors.	19% of local self-governments and five sectors	Target value achieved.	S
RI # 5. The number of sectors and institutions using an open-source platform with risk information.	PA 2	Baseline (2017): 0	Target (2020): 5	146	146 institutions registered as active users of the platform.	Target value significantly exceeded.	H
<b>PDO 3. Strengthening the institutional and legal framework to effectively manage the fiscal impact of natural disasters.</b>							
RI # 7. The Fiscal Risk Unit established with staff.	PA 3	Baseline (2017): 0	Target (2020): Fiscal risk unit established in the Ministry of Finance	Unit established.	Unit is functioning.	Target value realized.	S
RI # 8. The Government enacts a set of fiscal incentives and a model Disaster Risk Finance (DRF) for Local Governments	PA 3	Baseline (2017): Not enacted.	Target (2020): At least three municipalities adopted the DRF program.	Three municipalities prepared plans for DRF but the plans were not adopted when the operation closed.	Adoption expected in 2022.	Target value not realized.	M
RI # 9. Submission of a consolidated report on historical post-disaster	PA 3	Baseline (2017): 0	Target (2020). The report is submitted to the Budget Department.	A consolidated report was submitted to the Budget Department.	Report submitted at the end of 2020.	Target value realized.	S



expenditure to the Budget Department.							
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## Rating

Satisfactory

## 5. Achievement of Objectives (Efficacy)

### OBJECTIVE 1

#### Objective

PDO 1. Strengthening the institutional and legal framework to effectively manage the physical impact of natural hazards.

#### Rationale

**Theory of change.** Operationalizing the Public Investment Management Office (PIMO) for reconstruction works and establishing a dedicated national entity for planning DRM measures were likely to strengthen the institutional framework for managing natural hazards. Flood risk assessments, collecting information on natural damages and losses and increasing the number of sectors and institutions using an open-source geospatial platform with risk information, were aimed at increasing Serbia's capacity for planning and implementing disaster and climate risk management activities that would aid in managing the physical impact of natural hazards. These outcomes were likely to contribute to long-term outcome of building of Serbia's resilience and its capacity to cope with and recover from adverse natural hazards.

**The PIMO.** The PIMO was operational from September 2017. As of October 31, 2021, it was managing reconstruction projects funded by the World Bank, the European Investment Bank (EIB), the Council of Europe Development Bank (CEB), and the KfW Development Bank. The PIMO submitted annual reports for Cabinet approval in 2017, 2018 and 2019. These reports were verified by Bank experts to contain the required information to better manage risks. When this operation closed, the PIMO was implementing the "EU for Serbia resilient to disasters program" (This program funded by EU (EURO funds of 14 million) was to be used for infrastructure upgrades, procuring necessary equipment, and capacity building at various levels). To support its increasing portfolio of activities, the PIMO increased its staffing from 42 in 2017 to 73 by 2021, with 32 engaged in engineering services, 18 in coordination services and 23 in providing managerial, technical and logistical services.

**The Sector for Emergency Management (SEM).** The Government enacted legislation for establishing the SEM in the Ministry of Interior (MoI) as the national agency for implementing the National Disaster Risk Management Plan. The SEM was responsible for overseeing risk assessments of administrative units



from national to local levels, sector institutions, and large public and commercial enterprises. Following its mandate, SEM supervised the completion of national and local flood risk assessments, that enabled the local governments to develop rescue plans and disaster risk reduction investment plans. Of the 174 local self governments, the MoI approved the disaster risk assessments of 132. Of these, 65 received approval for developing protection and rescue plans.

**National flood risk assessments.** The Ministry of Agriculture, Forestry and Water Management completed flood risk assessments of 75 identified flood prone areas in October 2020. The assessments complied with the EU Flood Directive and covered 2,750 kilometers (km) of river reaches. The assessments concluded that 115 towns and municipalities (with a population of 5.5 million, about 75% of Serbia's population) are prone to potential flooding. This assessments strengthened Serbia's capacity for mitigation works such as dikes or retention areas, restricting buildings in high-flood zones, improving hydro meteorological forecasting, and helping in determining contingency reserves in the national budget.

**Number of sectors and local self-governments applying the post-disaster loss and needs assessment (PDNA) methodology.** The ICR (paragraph 53) observes that 23 local governments were affected by floods in June 2019. Nineteen of the affected local governments applied this methodology to quantify the damages and losses and developed subsequent recovery programs based on the data collected by the affected municipalities. The PDNAs covered five sectors: housing, agriculture, public facilities, economy and infrastructure. The ICR notes that most local governments continue to apply this methodology for quantifying data on damages, even though they are not mandated to do so.

**Number of sectors and institutions using an open source geospatial platform with risk information.** Following the adoption of the law on National Infrastructure of Geospatial Data on April 2018, the Government developed GeoSerbia - a national Spatial Data Infrastructure (SDI) - to improve access to spatial data (electronic geographic data) for risk assessment and decision making at the national and local levels. The Geodetic Authority of Serbia (RGA) is responsible for operating GeoSerbia. When the operation closed, GeoSerbia had 73 metadata sets, 285 datasets and 39 data set services, with data on population, education and health institutions, seismic weather maps, landslide locations, cultural heritage sites, nature resources, climatological stations and river banks. This data was available to the public and state institutions. When the operation closed, there were 146 institutions registered as active users of the platform (including 25 ministries/government agencies, 107 municipalities and cities, four bodies of the autonomous province and nine public enterprises and companies). The institutions represented sectors like environment, agriculture, real estate, urban planning, geology, water and transport. The PIMO developed the Disaster Risk Information System (DRIS) on this platform as part of the larger Disaster Risk Registry platform that is now being used to create a consolidated centralized repository of risk information at the national level.

The efficacy of this PDO is satisfactory.

## Rating

Satisfactory

## OBJECTIVE 2

### Objective

Strengthening the institutional and legal framework to effectively manage the fiscal impact of natural hazards.



## Rationale

**Theory of change.** Reforms aimed at establishing a fiscal risk unit, developing incentives and a Disaster Risk Financing Plan for local self-governments and preparing an annual consolidated report on historical post-disaster expenditure data were likely to strengthen the institutional and legal framework to manage the fiscal impact of natural hazards and aid in Serbia to cope with and recover from natural disasters.

**Fiscal Risk Unit.** Following the adoption of the Systemization Act in March 2018, the Ministry of Finance (MoF) established a new group in the Department for Macroeconomics and Fiscal Analysis for managing fiscal risks. The group has since then been elevated to a sector. This sector unit with a staff of fourteen people, was tasked with the responsibility of quantifying the disaster-risk related contingent liabilities. Following the setting of this unit, the Bank through a Swiss State Secretariat for Economic Affairs (SECO) financed Technical Assistance project supported production of a fiscal risk statement in the last quarter of 2020 to enhance management of the fiscal impact of natural hazards and national budget planning.

**Disaster Risk Financing for local self-governments.** Three pilot municipalities - Učice, Paraćin, and Kraljevo - prepared disaster risk financing plans. These plans build on previous work supported by the Bank Technical Assistance program, on assessing the legal framework for disaster risk financing at the municipal level, and enabling them to rely less on public spending through leveraging risk financing solutions. However, there were delays in adopting the plans - mainly because the local self governments were not mandated to adopt the plans.

**Historical post-disaster expenditure data.** The fiscal sector collected data from almost thirty State-owned enterprises (SOEs) on disaster-related expenditures. The consolidated data and the post-disaster database were delivered to the Budget department at the end of 2020. This data was to support national budget planning and managing the fiscal impacts of natural hazards through quantified information.

**Drawdown of CAT-DDO Instrument.** Since program effectiveness, Serbia requested three withdrawals. First, on July 10, 2018, the MoF requested a partial drawdown of EUR 30 million based on the Government's decision on June 21, 2018, declaring a natural disaster due to the flooding caused by sudden heavy rainfall. Second, on June 20, 2019, the MoF requested a partial drawdown of EUR 15 million, following the Government's decision on June 6, 2019, declaring a natural disaster due to flooding caused by heavy rains and hailstorms. and third, on March 20, 2020, the MoF requested a drawdown of EUR 20.77 million to support the Government in taking measures to manage the impact of COVID - 19 pandemic. Disbursements for these withdrawals were fully processed upon confirmation of the Borrower's compliance with the drawdown trigger.

Given that two of the three outcomes were realized, efficacy of this PDO is satisfactory.

## Rating

Satisfactory

## Overall Achievement of Objectives (Efficacy)



## Rationale

Efficacy of PDO 1 is rated as satisfactory, based on the substantial ratings for operationalization of the PIMO, establishment of the SEM, for completion of national flood risk assessments and the number of sectors and institutional applying the PDNA methodology, and the high for the number of sectors and institutions using an open-source platform with risk information.

Efficacy of PDO 2 is rated as satisfactory based on the substantial ratings for establishment of the fiscal risk unit and submission of a consolidated report on historical post-disaster expenditure. However, the rating is modest for developing disaster risk financing for local self governments.

Combining the achievement ratings for the three PDOs gives a **Satisfactory** rating for efficacy.

## Overall Efficacy Rating

Satisfactory

## 6. Outcome

### Rationale

The prior actions were appropriate first steps along the results chain for realizing the intended objectives. Of the nine results indicators, eight indicators were a direct measure of the Pillar's achievement and could be verified.

Combining the achievement ratings for the two objectives gives a **Satisfactory** rating for outcome.

### a. Rating

Satisfactory

## 7. Risk to Development Outcome

**Institutional risk.** The ICR (paragraph 70) observes that the DRM sector roles are now anchored in Serbian Law and local development plans. The PIMO established in 2015 as the lead agency for reconstruction s financed partly through budgetary allocations and external sources. The SEM within the MoI and the fiscal risk unit in the MoF also have budgetary allocation. However, although the annual budgets for PIMO and SEM has been growing since their inception, overall financing of these institutions remains low relative to their growing mandates. In the case of SEM, allocated funds do not adequately cover operational costs such as staffing and equipment. In the case of the fiscal management unit, there is a need to strengthen staffing to enable execution of its mandate effectively. There is moderate risk that the institutional capacity of these entities could be undermined due to lack of adequate funding.



**Technical risk.** There is moderate technical risk that activities like the GeoSerbia platform may be compromised due to the lack of operational, technical and financial capacities of line ministries. Further, capacity building activities are still required to improve DRM at the local levels.

## 8. Assessment of Bank Performance

### a. Bank Performance – Design

#### Rationale

As this operation was the first CAT- DDO in the Europe and Central Asia region, the Bank prepared this operation based on the experiences from previous Bank-financed CAT-DDO operations in Latin America and the Caribbean, East and South Asia and Africa. The analytical underpinnings of this operation were sound, and design of this operation was able to draw on the analytical works such as, the completed post disaster needs assessments (2014), the ongoing Emergency Recovery Loan Operation, the World Bank Technical Assistance program (National Risk Management Program (P154128), and the findings of the Southeast Europe and Caucasus Catastrophe Risk Insurance Facility. The prior actions of this operation were based on sound analytical underpinnings (discussed in Section 3).

The Bank prepared this operation in close coordination with Serbia's Ministry of Finance (MOF), and with other Development Partners such as: (i) The European Commission (EC), the Global Facility for Disaster Reduction and Recovery (GFDRR), the Swiss Agency for Development and Cooperation (SDC) for developing the National Disaster Risk Management Program; (ii) The United Nations (UN), SDC and GFDRR for developing the National Action Plan; (iii) The SDC for reforms on open data and data sharing; and (iv) The disaster risk financing program was developed through a partnership between the Swiss State Secretariat for Economic Affairs (SECO) and the World Bank's Disaster Risk Insurance and Insurance Program that aimed to build the financial resilience of middle-income countries (PD, paragraph 67).

Several risks were identified at appraisal, including moderate macroeconomic and institutional capacity risks, and low risk regarding the technical design, given the Bank's substantial ongoing technical assistance for Serbia. With mitigation measures, the overall operation risk was assessed as moderate at appraisal (PD, page 27). These measures proved to be adequate during implementation.

#### Rating

Satisfactory

### b. Bank Performance – Implementation

#### Rationale

Five Implementation Status Results (ISR) Reports were filed during the operation's lifetime of just over two years. The in-country presence of the Bank team enabled the Bank to constantly track the progress of reforms,





coordinate between government and other development partners, engage in high-level policy dialogue and mobilize additional resources to advance reforms when the need was identified (ICR, paragraph 67). The Bank team's regular engagement with counterparts also helped in providing just-in-time support in the event of disasters. This enabled the Bank to handle the withdrawal request for disbursement of CAT - DDO funds and providing immediate liquidity after a disaster event (ICR, paragraph 69).

## Rating

Satisfactory

### c. Overall Bank Performance

#### Rationale

Overall bank performance is assessed as satisfactory.

### Overall Bank Performance Rating

Satisfactory

## 9. Other Impacts

### a. Social and Poverty

This operation supported Serbia's most vulnerable population, by contributing to a faster emergency response and avoiding disruptions to service delivery. Through the CAT- DDO instrument, the operation provided immediate liquidity to the Government, that were critical to avoid disruptions in provision of social assistance, in the aftermath of the flood and hail events in 2018 and 2019.

### b. Environmental

This operation did not include any policies that could directly or indirectly influence the environment, forests and other natural resources (PD, paragraph 71).

### c. Gender

It is unlikely that the operation had an impact on gender indicators.



#### d. Other

There were no observed unintended impacts.

## 10. Quality of ICR

### Rationale

The ICR is well-written. The ICR provides a clear description of the country context when the Bank prepared this operation. The theory of change articulated in the text is clear and clearly shows the links between the prior actions, the chosen results indicators and the intended outcomes. The ICR provides a clear description of the CAT-DDO instrument. The ICR draws suitable lessons from the experience of implementing this project.

#### a. Rating

Substantial

## 11. Ratings

Ratings	ICR	IEG	Reason for Disagreement/Comments
Outcome	Satisfactory	Satisfactory	
Bank Performance	Satisfactory	Satisfactory	
Relevance of Results Indicators	---	Satisfactory	
Quality of ICR	---	Substantial	

## 12. Lessons

The ICR draws the following main lessons from the experience of implementing this operation.

**1. Strong institutional champions can be very helpful for advancing a complex reform program requiring coordination across all involved agencies.** The Public Investment Management Office (PIMO) in this operation provided the impetus for inter-agency coordination of disaster risk management related policy actions and the Ministry of Finance (MOF) was crucial to advocate the need for innovative risk financing mechanisms and associated institutional reforms, leading to the development of CAT-DDO operation.

**2. An enabling political environment at international level can be useful for incentivizing national reforms.** As a potential candidate for membership within the European Union (EU), Serbia was making efforts



to align its legal framework with the EU regulations and directives. The alignment of the operation with EU regulations added incentives in this operation for achieving the results such as the completion of the flood risk assessment (EU Flood Directive) and the establishment of the GeoSerbia (INSPIRE Directive).

**3. Solid analytical foundation and ongoing support by an overarching technical assistance program can help in designing an effective program.** In the case of this operation, the Bank's technical assistance program proved to be helpful in designing the prior actions and the indicators for achieving the intended outcomes.

**4. Besides providing immediate liquidity in the aftermath of a disaster, a CAT-DDO instrument can also be useful for enabling improvements in underlying systems and institutions.** The CAT-DDO supported the Government in this operation through three separate withdrawals triggered by different types of emergency events. This operation through the specification of prior actions and pillars also helped in strengthening institutions for risk management.

### 13. Project Performance Assessment Report (PPAR) Recommended?

No