

Country Name	Capacity Development toward Effective Disaster Risk Management
Republic of Turkey	

I. Project Outline

Background	Turkey was known as one of the most earthquake-prone countries. Disaster and Emergency Management Presidency (AFAD) was newly established under Prime Ministry in 2009 based on the Law of 5902, which gave the highest priority to disaster risk management. However, there was no standardized method for risk assessment, and the nationwide risk assessment was therefore not conducted.										
Objectives of the Project ¹	<p>The project aimed to improve the capability of AFAD central and Provincial AFADs for disaster risk management in Turkey through (i) preparation of a draft version of guidelines on disaster risk assessment and Disaster Risk Reduction Plan (DRRP), (ii) preparation of disaster risk assessments and DRRPs in the pilot provinces, and (iii) formulation of a sustainable extension mechanism of standardized guidelines and disaster risk assessment applicable countrywide, thereby enhancing capacity on disaster risk management through risk assessment throughout the country.</p> <ol style="list-style-type: none"> Overall Goal: Capacity on disaster risk management through risk assessment is enhanced throughout the country. Project Purpose: The capability of AFAD central and Provincial AFADs for disaster risk management is improved. 										
Activities of the Project	<ol style="list-style-type: none"> Project Site: Ankara and the pilot provinces (i.e., Bursa (the original pilot province) and Samsun and Kahramanmaraş (the additional pilot provinces selected in the fourth year).² Main Activities: (i) Preparation of a draft version of guidelines on disaster risk assessment and DRRP; (ii) preparation of Action Plans for local DRRPs called “Provincial Risk Reduction Plans (IRAPs)” in the pilot provinces through training in Japan, and organization of a high-level meeting in Samsun for IRAP formulation and an IRAP informative workshop for the pilot provinces;³ (iii) organization of an informative and awareness-raising workshop on natural disaster risk reduction (DRR).⁴ Inputs (to carry out above activities) <table style="width: 100%; border: none;"> <tr> <td style="width: 50%;">Japanese Side</td> <td style="width: 50%;">Turkish Side</td> </tr> <tr> <td>1) Experts: 14 persons</td> <td>1) Staff Allocated: 48 persons</td> </tr> <tr> <td>2) Trainees Received: 26 persons</td> <td>2) Building and facilities: Project Office, etc.</td> </tr> <tr> <td>3) Local cost</td> <td>3) Local cost</td> </tr> </table> 			Japanese Side	Turkish Side	1) Experts: 14 persons	1) Staff Allocated: 48 persons	2) Trainees Received: 26 persons	2) Building and facilities: Project Office, etc.	3) Local cost	3) Local cost
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Project Period	(ex-ante) January 2013 – December 2016 (actual) March 2013 – March 2017	Project Cost	(ex-ante) 467 million yen (actual) 238 million yen								
Implementing Agency	Prime Ministry, Disaster and Emergency Management Presidency of Turkey (AFAD)										
Cooperation Agency in Japan	OYO International Corporation; Oriental Consultants Co., Ltd. Yachiyo Engineering Co., Ltd.										

II. Result of the Evaluation

<Constraints on Evaluation>

- Due to the COVID-19 Pandemic, field survey and expected on-site meetings for data collection had to be cancelled. To overcome these difficulties, online meetings were set with the implementing agency, and only once, the face-to-face meeting could be realized for the confirmation of the project related issues.

<Special Perspectives Considered in the Ex-Post Evaluation>

- Continuation status of the effects of the selected indicators of the Outputs, including implementation status of risk assessments and formulation status of DRRPs (IRAPs) in the pilot provinces, was confirmed as Supplementary Information.
- The Project Purpose Indicator 2 was modified from “Some activities written in the prepared DRRP of Bursa province are started” (PDM Ver2) to “DRR Planning activities are started in the pilot provinces” in conducting the terminal evaluation, and the modification was approved through M/M (2/March/2017). This latest Project Purpose Indicator 2 shall be used since the ex-post evaluation is basically conducted based on the same perspectives as those of the terminal evaluation. This modification, however, is inappropriate from the logical viewpoint because the indicator after modification is logically at a lower level than the Output level (i.e., preparation of risk assessments and DRRPs (IRAPs) in the pilot provinces and approval of them by AFAD central (AFAD HQ) and pilot provincial AFADs) whereas the Project Purpose should be a logical consequence of the

¹ The Objectives are based on the latest Logical Framework called “Project Design Matrix (PDM)” Ver3 attached to Minutes of Meetings (M/M) (2/March/2017), but some grammatical errors were corrected in this report.

² The target area for the capacity improvement was changed from “AFAD central and AFAD Bursa” to “AFAD central and Provincial AFADs” through M/M (2/March/2017) based on the recommendation of the terminal evaluation to reflect the actual situation. Originally, Bursa Province was selected as the pilot province, where a risk assessment and the provincial DRRP (IRAP) would be implemented using the draft guidelines prepared in the project. Although the draft guidelines were prepared as planned, the subsequent activities for preparation of the risk assessment and the IRAP in Bursa Province were suspended. It was because one of the major Japanese inputs, dispatch of the Japanese expert team (JET), was not provided from the second year as the contract between JICA and the JET was expired with their new terms of reference not being concretized in a timely manner. In the meantime, JICA dispatched Project Consultation Mission three times, which realized training in Japan in December 2016 to develop the capacity for effective disaster risk reduction planning, and three provinces, including Bursa, were selected to participate in the training as the pilot provinces.

³ As stated in the footnote 2, the activities planned for preparation of the risk assessment and the IRAP were not conducted.

⁴ The planned activities were not conducted either for formulation of a sustainable extension mechanism of the standardized guidelines and disaster risk assessment.

Outputs. Therefore, the Project Purpose Indicator 2 of PDM Ver2 (i.e., the commencement of activities written in the prepared DRRP (IRAP) of Bursa province) was also used in the ex-post evaluation as Supplementary Information from the logical perspective.

- The target number of the Overall Goal Indicator 2 (i.e., The number of Local DRRPs is increasing at the provincial level) is not specified in the PDM. This evaluation set the target number to be “41” since DRRPs (IRAPs) were planned to be completed in 41 provinces from 2017-2019 according to the Action Plan for DRRP prepared through the training in Japan.

1 Relevance

<Consistency with the Development Policy of Turkey at the Time of Ex-Ante Evaluation>

This project is consistent with Turkey’s development policies at the time of ex-ante evaluation. The Ninth National Development Plan (2007-2013) places importance on measures for disaster prevention, such as the inclusion of disaster management in regional development and urban planning, establishment of a new organization to conduct disaster management as a public service”, etc. and the National Earthquake Strategy and Action Plan (UDSEP) (2012-2023), which was formulated to be prepared for earthquakes across sectors, promotes activities for that.

<Consistency with the Development Needs of Turkey at the Time of Ex-Ante Evaluation>

This project is consistent with the need for capacity development on disaster risk management at the time of ex-ante evaluation, as mentioned in “Background” above.

<Consistency with Japan’s ODA Policy at the Time of Ex-Ante Evaluation>

This project is consistent with the cooperation policy of Japan with Turkey at the time of ex-ante evaluation. The Country Assistance Policy for the Republic of Turkey (2012) maintains that Japan cooperates on DRR, preparedness, and response for Turkey’s sustainable economic development.

<Evaluation Result>

In light of the above, the relevance of the project is high.

2 Effectiveness/Impact

<Status of Achievement of the Project Purpose at the Time of Project Completion>

The Project Purpose was partially achieved by the time of project completion. The project prepared four draft guidelines (disaster reduction planning and three draft complementary guidelines for earthquake and tsunami risk assessment, landslide risk assessment, and risk assessment of man-made disaster induced by earthquake, tsunami, and landslide) and presented them at the second Joint Coordination Committee (JCC) meeting in June 2014. However, it was not approved by AFAD HQ during the project implementation since necessary activities for the approval were not carried out due to the bureaucratic structure of JICA and AFAD⁵ (Indicator 1). Therefore, the test usage of the guidelines for the DRRP (IRAP) in Bursa and the improvement of the guidelines (if needed) did not take place during the project.

AFAD HQ started DRR planning activities in the pilot provinces by organizing an IRAP informative workshop inviting provincial AFADs and municipalities from the three pilot provinces (Indicator 2) but did not result in the formulation and implementation of IRAPs in the pilot provinces (Supplementary Information).

<Continuation Status of Project Effects at the Time of Ex-Post Evaluation>

The effects of the project continued to the time of ex-post evaluation. After project completion, a group of AFAD HQ, including those trained in Japan under this project, tested the above-mentioned draft guidelines in the preparation of the IRAP in Kahramanmaraş and improved them into a single guideline, the Provincial Disaster Risk Mitigation Plan Preparation Guideline (hereafter, “the single guideline”). The reason behind why making a single guideline was to need applicable and practical one for all provinces and staffs to be worked for preparation IRAPs. For instance, in the previous one, preparation of risk analysis for disaster types are explained step by step but in the single guidelines recommends usage of those available assessments, which can be received from the tools of AFAD such as AFAD-Red (AFAD Earthquake Pre-damage and Loss Estimation System), ARAS (Disaster Risk Reduction System), Aydes (Disaster Management and Decision Support System) that are integrated with the single guideline. AFAD HQ approved and distributed it to all provinces in November 2020. Provinces, including the three pilot provinces of this project, started to prepare IRAPs. Risk assessment was carried out in all three pilot provinces based on the single guideline. The IRAPs in Samsun Province and Kahramanmaraş Province were approved by the respective Governorship in 2020, and the preparation of the IRAP was ongoing in Bursa Province as of May 2021.

<Status of Achievement of the Overall Goal at the Time of Ex-Post Evaluation>

The Overall Goal was partially achieved by the time of ex-post evaluation. According to AFAD HQ, AFAD staff members in the country obtained sufficient capacity to coordinate with relevant ministries and provinces to implement disaster risk management activities, which were shown by: 1) such activities were part of routine work of AFAD personnel, and they enhanced their capacity through experience; 2) IRAPs were completed successfully in seven provinces by the coordination and guidance by the respective provincial AFADs; and 3) staff members of AFAD HQ improved their capacity by preparation of the guidelines under this project and upgrading of them after project completion (Indicator 1). Although the preparation of IRAPs is behind the schedule of the Action Plan for DRRP (IRAP) prepared through the training in Japan under this project, the preparations are very fast considering the date of approval of the single guideline (i.e., November 2020). According to AFAD HQ, IRAPs will be completed and approved in all provinces by the end of 2021 (Indicator 2).

<Other Impacts at the Time of Ex-Post Evaluation>

No negative impacts were observed. According to AFAD HQ, there were positive impacts in the provinces regarding the creation of safe cities by disaster mitigation efforts based on IRAPs. However, implementation of mitigation activities (investments in super and infrastructures, schools, hospitals, etc.) was being done step by step by the related institutions.

<Evaluation Result>

Therefore, the effectiveness/impact of the project is fair.

Achievement of Project Purpose and Overall Goal

⁵ The Terminal Evaluation Report stated that there was a “long internal process of JICA to preside the dispatch of JET, frequent relocation top-management personnel in AFAD leading to the lack of sustained prioritization of the Project.” See the footnote 2 for the reason for the suspension the dispatch of JET.

Aim	Indicators	Results	Source																													
(Project Purpose) The capability of AFAD central and Provincial AFADs for disaster risk management is improved.	Indicator 1 The guidelines* are officially approved by AFAD. * The guidelines refer to “the guidelines on disaster risk assessment and DRRP” according to the logical framework.	Status of the Achievement (Status of the Continuation): not achieved (continued) (Project Completion) Activities towards the approval of the guidelines planned in the logical framework <table border="1"> <thead> <tr> <th>Planned activity</th> <th>Status by March 2017</th> </tr> </thead> <tbody> <tr> <td>Preparation of draft guidelines</td> <td>Completed.</td> </tr> <tr> <td>Approval of draft guidelines by JCC</td> <td>Not completed.</td> </tr> <tr> <td>Utilization of draft guidelines in risk assessment and DRRP formulation in the pilot provinces</td> <td>Not conducted.</td> </tr> <tr> <td>Feedback based on the lessons learned in the pilot provinces to the draft guidelines</td> <td>Not conducted.</td> </tr> <tr> <td>Identification of process of approving guidelines</td> <td>Not conducted.</td> </tr> <tr> <td>Approval of the guidelines by AFAD (Project Purpose Indicator 1)</td> <td>Not conducted.</td> </tr> </tbody> </table> (Ex-Post Evaluation) After project completion, AFAD HQ improved the above-mentioned draft guidelines into a single guideline, the Provincial Disaster Risk Mitigation Plan Preparation Guideline, and approved and distributed it to all provinces.	Planned activity	Status by March 2017	Preparation of draft guidelines	Completed.	Approval of draft guidelines by JCC	Not completed.	Utilization of draft guidelines in risk assessment and DRRP formulation in the pilot provinces	Not conducted.	Feedback based on the lessons learned in the pilot provinces to the draft guidelines	Not conducted.	Identification of process of approving guidelines	Not conducted.	Approval of the guidelines by AFAD (Project Purpose Indicator 1)	Not conducted.	source: Terminal Evaluation Report; Questionnaire and interview with AFAD HQ															
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Indicator 2 Disaster Risk Reduction Planning activities are started in the pilot provinces.	Status of the Achievement (Status of the Continuation): partially achieved (continued) (Project Completion) AFAD HQ started DRR planning activities in the pilot provinces by organizing an IRAP informative workshop inviting provincial AFADs and municipalities from the three pilot provinces but did not result in the formulation and implementation of IRAPs in the pilot provinces. (Ex-Post Evaluation) Provinces, including the three pilot provinces of this project, started to prepare IRAPs.	source: Terminal Evaluation Report; Questionnaire and interview with AFAD HQ																														
(Overall Goal) Capacity in disaster risk management through risk assessment is enhanced throughout the country.	Indicator 1 AFAD staff members obtain capacities to coordinate with relevant ministries and provinces to implement disaster risk management activities.		(Ex-Post Evaluation) achieved AFAD HQ considers the capacity is enough based on the following. 1) Disaster risk management activities are part of the routine work of AFAD personnel, and they enhanced their capacity through experience. 2) IRAPs were completed successfully in seven provinces by the coordination and guidance by the respective provincial AFADs. 3) Staff members of AFAD HQ improved their capacity by preparing the guidelines under this project and upgrading them after project completion.	source: Questionnaire and interview with AFAD HQ																												
	Indicator 2 The number of Local Disaster Risk Reduction Plans is increasing at the provincial level.	(Ex-Post Evaluation) not achieved Number of provinces in which DRPP was prepared/approved <table border="1"> <thead> <tr> <th rowspan="2">Year</th> <th rowspan="2">Plan as per the Action Plan for DRRP prepared through the training in Japan</th> <th colspan="2">Actual (as of May 2021)</th> </tr> <tr> <th>Prepared (*)</th> <th>Approved (*)</th> </tr> </thead> <tbody> <tr> <td>2017</td> <td>3 (pilot provinces)</td> <td>-</td> <td>-</td> </tr> <tr> <td>2018</td> <td>12</td> <td>-</td> <td>-</td> </tr> <tr> <td>2019</td> <td>26</td> <td>1 province (Kahramanmaraş)</td> <td>-</td> </tr> <tr> <td>Total</td> <td>41</td> <td>1 province (Kahramanmaraş)</td> <td>-</td> </tr> <tr> <td>(Ref) 2020</td> <td>40</td> <td>6 provinces (Samsun, Afyonkarahisar, Rize, Tekirdağ, Sivas, Adana)</td> <td>7 provinces (Karamanmaraş, Samsun, Afyonkarahisar, Rize, Tekirdağ, Sivas, Adana)</td> </tr> <tr> <td>Grand total</td> <td>81</td> <td>7 provinces</td> <td>7 provinces</td> </tr> </tbody> </table> (*) The IRAP's of the remaining 74 provinces are being prepared and expected to be completed and approved by the end of 2021.	Year		Plan as per the Action Plan for DRRP prepared through the training in Japan	Actual (as of May 2021)		Prepared (*)	Approved (*)	2017	3 (pilot provinces)	-	-	2018	12	-	-	2019	26	1 province (Kahramanmaraş)	-	Total	41	1 province (Kahramanmaraş)	-	(Ref) 2020	40	6 provinces (Samsun, Afyonkarahisar, Rize, Tekirdağ, Sivas, Adana)	7 provinces (Karamanmaraş, Samsun, Afyonkarahisar, Rize, Tekirdağ, Sivas, Adana)	Grand total	81	7 provinces
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3 Efficiency

Both the project cost and the project period were within the plan (ratio against the plan: 51% and 100%, respectively). However, it should be noted that the project cost was lower than planned since the JET was not dispatched as planned from the second year. Also, due to some institutional arrangement, some of the Outputs of the project were not produced as planned. And we cannot verify that the decrease in the Outputs is commensurate with the decrease in the Inputs. Therefore, the efficiency of the project is fair.

4 Sustainability

<Policy Aspect>

The importance of DRR is well-enough underlined in national development plans. The 11th National Development Plan (2019-2023)

underlined the importance of DRR in chapter “2.4. Livable Cities, Sustainable Environment.” Under this chapter, it is stated as “722.2. Provincial disaster risk reduction plans will be prepared by taking priority disaster types into consideration to reduce disaster hazards and risks” in the sub-chapter of “2.4.8. Disaster Management.” Besides, the UDSEP (2012-2023) is still effective at the time of ex-post evaluation. Furthermore, the Climate Change Action Plan (2011-2023) and the Climate Change Adaptation Strategy and Action Plan (2011-2023) under the responsibility of the Ministry of Environment and Urbanization also support the improvement of DRR.

<Institutional/Organizational Aspect>

The organizational setup at the central and provincial levels to promote DRRPs (IRAPs) is ensured. AFAD established working groups both at provinces and its HQs and assigned staff to deal with the preparation of IRAPs. According to AFAD HQ, the number of staff allocated at the HQ and provinces depends on the needs, but it is sufficient since available personnel works for the given subjects.

<Technical Aspect>

AFAD seems to provide knowledge and experience sharing among staff members who are in charge of IRAPs. In addition to the findings mentioned in <Status of Achievement of the Overall Goal at the Time of Ex-Post Evaluation> above, AFAD HQ commented that to enhance capacities of staffs, training seminars were provided when needed in addition to regular studies on DRR at both the central and provincial levels.

<Financial Aspect>

So far, no budget constraints for the preparation of IRAPs have been observed. According to AFAD HQ, there is no specific budget for IRAP preparation, but AFAD’s own budget is utilized, and no budgetary constraints have been faced.

<Evaluation Result>

In light of the above, no problem has been observed in terms of the policy, institutional/organizational, technical, and financial aspects. Therefore, the sustainability of the project effects is high.

5 Summary of the Evaluation

The project partially achieved the Project Purpose by the time of project completion. Although the draft guidelines on disaster risk assessment and DRRP was prepared, it was not approved by AFAD. Also, provincial AFADs did not start the formulation of IRAPs. After project completion, however, the guidelines were upgraded into a single guideline, and provinces started to formulate IRAPs. The Overall Goal of improving the capacity of disaster risk management in Turkey was partially achieved. The improvement of the capacity was observed, and the formulation of IRAPs progressed. This pace accelerated after the approval of the single guideline in 2020, although the target was not reached until then. No problem was found on sustainability. As for efficiency, both the project cost and the project period were within the plan, but some of the Outputs were not produced as planned.

Considering all of the above points, this project is evaluated to be satisfactory.

III. Recommendations & Lessons Learned

Recommendations for Implementing Agency:

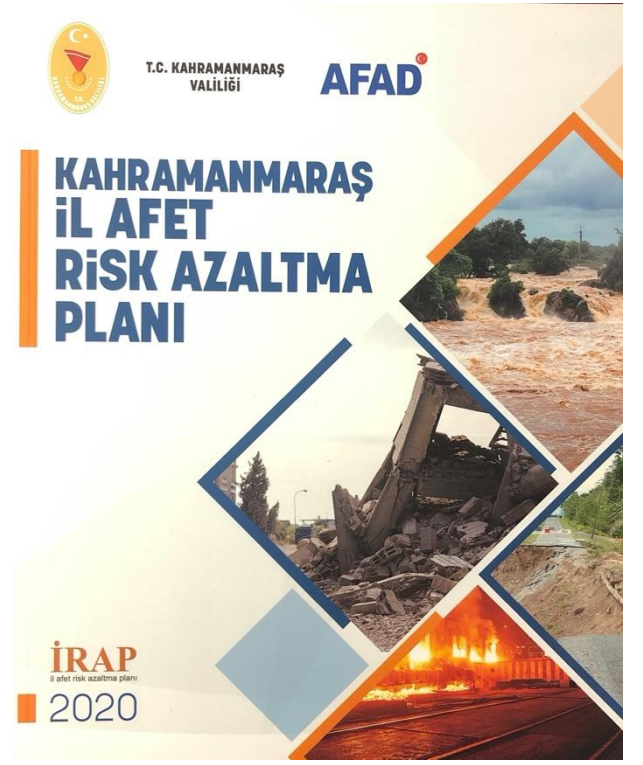
- Although IRAPs would have been completed in all provinces (81) in 2020, still 74 are in preparation and expected to be completed and approved by the end of 2021. In addition, after the approval stage, the most essential part is investments and improvements based on the plan to mitigate the risks. As a disaster-prone country, preparation of IRAPs and their implementation, such as investments and improvements, need to be done as soon as possible by all relevant ministries and organizations to mitigate the possible loss and damages in Turkey. AFAD HQs and provincial AFADs are recommended to facilitate such an implementation process.

Lessons Learned for JICA:

- The project timetable in line with the preparation of IRAPs and even to some extent covering implementation of the plans in some provinces could have been set during project planning or modified during the project implementation appropriately.
- The draft guidelines prepared during the projects seem not practical to use by the provincial level; thus, AFAD HQ improved it into the single guideline used by all provinces. It is recommendable that when preparing a tool like guidelines, manuals, etc., user’s opinions need to be reflected well enough, and some practices in their utilization should be confirmed during the project implementation for a smooth outcome.



IRAP Guideline



Kahramanmaraş IRAP