



**WFP Ethiopia**  
**SPECIAL OPERATION SO 200752**

Country:	Ethiopia
Type of project:	Special Operation
Title:	Construction of Geeldoh Bridge to Facilitate Humanitarian and Trade Access to Nogob/Fik Zone in Somali Region of Ethiopia
Total cost (US\$):	<b>US\$ 4,057,595</b>
Duration:	13 months (01 September 2014 – 01 October 2015)

### **Executive Summary**

1. As part of operations, WFP is providing food aid in the Somali Region of Ethiopia. Access to the Woredas of Lagahida and Salahad in the Nogob (Fik) Zone of this area is problematic. Under the current transportation model, food is dispatched from either Jijiga or Dire Dawa and can take in excess of 4 days to reach the Woredas. This can increase by two-three times in the rainy season. To improve food security and WFP transportation efficiencies, it is proposed to construct a bridge across the Wabe-Shebele River.
2. Currently, Lagahida and Salahad are cut off from the rest of the Somali Region, and bridging the Wabe-Shebele will facilitate a number benefits including:
  - a) Improving food security by allowing access from one of the more isolated and poor areas of Ethiopia to one of the more food resilient areas;
  - b) Enhance WFP transportation efficiencies with reduced transportation costs;
  - c) To provide more rapid access to a vulnerable food insecure area which acts a mitigation measure against delays in emergency scenarios;
  - d) By opening up a trade route it will encourage socio-economic development in the Zone in line with Ethiopia's Growth & Transformation Programme (GTP);
  - e) Better access to services where these are more accessible and/or of better quality on the eastern side of the river;
  - f) Reduced risk of death or mishap from cross river travel on unsafe rafts or vessels;
  - g) Historical disputes between the Oromia and Somali communities add to the risks associated with the transportation of humanitarian assistance through Oromia which will be alleviated with the bridge access;
3. Food aid for the 2 Woredas is dispatched from both Dire Dawa and Jijiga to the East of Nogob Zone (refer to the map attached in Appendix A). Presently, access to the Woredas is through the Oromiya Region from the west. The current route from Jijiga to Lagahida is 1,205 kilometers and 1,155 km to Salahad. The distance from Jijiga to Salahad through Hamaro crossing the river to the north-east at the proposed bridge site is 333 km, less than 1 day's drive. The reduced distance and transportation time would greatly reduce turnaround time and minimize transportation costs on the movement of food aid, and

additionally would enable WFP to undertake monitoring missions, which currently cannot be carried out.

4. In addition to the cost savings related to the transport of food aid, the bridge construction will also inevitably bring about an enhanced environment for all commercially traded goods to the woredas of Lagahida and Salahad. Although the 2013 WFP Rapid Market Assessment<sup>1</sup> did not specifically visit Lagahida and Salahad due to the prevailing insecurity, some of the general findings pertaining to the region as a whole will also positively affect the commercial trade in these areas. For example, in 2013, Federal and Regional governments established a system where selected food commodities could be imported from Somalia and Djibouti as duty free. The regions – in this case the Somali Region - then identified private wholesalers from each zone of the Somali Region to import these commodities. Presently, local traders in Lagahad and Salahida are only be able to access their quota from the imports through Djibouti because of access. Once the bridge will be built they will be able to access the Somalia and Somaliland quotas at a more competitive costs. Data collected from the rapid market assessment in the Somali Region shows that some sensible percentage of the commodities traded in the Somali Region are sourced from Somalia and Somaliland
5. The only access for locally traded goods between Lagahida and Hamaro is by way of locally constructed boats, these however can be used only during periods of low flow, to explain further the river depth varies from 2m during the dry season to 11m during the wet season. The flow changes from a gentle, shallow flow to deep torrents during periods of high rainfall. Access for communities to essential services is currently limited and the proposed bridge will improve access for communities by providing year round connection to the Regional Capital, Jijiga (Refer to map in Appendix A).

## **Project Background**

6. Due to security concerns and inaccessible routes, particularly during the wet or rainy season, WFP commenced investigating alternative access routes to Salahad and Lagahida. A number of field missions were carried out to identify any potential crossing points along the Wabe-Shebele River. A number of suitable sites were identified during the course of these missions. In addition to locating potential crossing points, physical condition surveys of the existing routes were conducted.
7. Prior to proceeding with the project, a number of both formal and informal discussions were held with the Regional Government to investigate the degree of interest for the potential project and the level of commitment that would be offered by the Regional Government. From the onset, the Regional Government confirmed their backing of this project.
8. After obtaining Regional Government support for the project, WFP raised the project with potential donors. The donor community support for the project was apparent from

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<sup>1</sup> Included as supporting document to this Special Operation

its inception, especially since this area of Ethiopia has received minimal investment in terms of development aid when compared to the rest of the country.

9. Following informal commitments and positive feedback from both the Regional Government and the donor community, WFP launched a Feasibility Study with the following objectives:
  - a) To identify the most suitable access route and bridge site if possible at the Wabe-Shebele River.
  - b) To propose a suitable bridge type (i.e. concrete, steel, timber, etc.).
  - c) To carry out on site investigation including inter alia; topographical, hydrological, geological, climate investigation and environmental assessment.
  - d) To deliver a cost estimate and proposed project timeline.
10. The feasibility study identified a suitable crossing point located some 16 km from the nearest constructed road. Access to the proposed site was over 'bush' ground and the last 2.5 km were inaccessible to vehicles and could only be accessed on foot. The results of the feasibility study were shared with both the donor community and the Regional Government. In an effort to demonstrate their commitment to the project the Regional Government set about clearing and constructing a feeder road to the proposed site. This was received well by the donor community and was perceived as a good example of Regional Government engagement and responsibility sharing.
11. Following the positive response and demonstrated action from the Regional Government and potential commitment from the donor community, the Ethiopia CO launched a tender for the detailed design for eventual construction.
12. Following the commitment from the Regional Government, the work carried out by WFP, and the positive outcome from the socio-economic study, DFID confirmed their funding of the project to the value of £GBP 2.5 million, which is equivalent to US\$ 4.25 million.
13. WFP carried out consultations and confirmed with both the Regional Government & Regional Roads Authority (RRA) that they will undertake the construction of approach roads to both the east and west sides of the proposed bridge. The approach roads account for approximately 23 km of access roads.
14. As detailed above the new route will provide WFP with savings on transportation costs. Refer to Appendix B for calculated potential savings. In total the new route will provide 28% savings in transportation costs for deliveries ex-Djibouti and a potential saving of 68% for deliveries ex-Berbera. To put this in context, given the current level of food distributions, US\$ 246,000 can be saved annually on transportation costs alone for deliveries ex-Djibouti. Where as a potential saving of US\$ 624,000 could be realized for deliveries ex-Berbera. The additional benefits to the local community are discussed throughout this document. This bridge will also serve to improve the population's security and quality of life.

## **Project Objectives**

15. Construction of the Geeldoh Bridge will achieve the following five strategic objectives:

- a) Enhance efficiencies in the supply of food aid for Salahad and Lagahida by reducing transport cost and delivery time.
- b) Increase local access and trade between communities on both sides of the river (socio-economic benefits).
- c) Open an already neglected area for further humanitarian development by improving accessibility.
- d) Improved access to health care facilities, education and justice systems.
- e) Improve security by providing greater access to remote areas.
- f) Improve access for monitoring and evaluation.

### **Project Description**

16. WFP will undertake the implementation of the construction of a new 90 m single span steel modular bridge. In addition to building the bridge WFP will reconstruct the approach roads to the bridge for approximately 1.5 km on either side, which includes almost 1 km of raised and drained embankments. The bridge, embankments and approach roads are designed taking the geographical location and remoteness of the site into consideration. Wherever possible, materials that can be sourced locally are included in the design, thus reducing the requirement for importation of goods, which is in keeping with good environmental practice and will serve to reduce the overall embodied energy of the project. For example the abutments/wingwalls have been designed as gravity structures with maximum use of locally sourced stone and minimal use of concrete and the retaining wall structures on the causeway are designed using primarily locally sourced stone within gabion baskets. The superstructure itself is designed to Ethiopian Roads Authority Bridge Design Manual with verification of WFP type loaded vehicles also.

### **Project Implementation**

17. The UK Department for International Development of Ethiopia (DFID) has committed to providing full funding for the implementation of the project. As part of WFP's commitment to the project, the Ethiopia CO has already funded and completed a feasibility study. The purpose of the feasibility study was to identify the most suitable bridging point, the bridge construction type, and also provide cost and time estimates. Following on from the outcomes of the feasibility study Ethiopia CO also funded the development of a detailed design of the bridge. The proposed structure is designed to international standards and capable of withstanding a 1:100 year flood event in the Wabe-Shebele River. The detailed design included a catchment study, a geotechnical investigation, an environmental impact assessment, and a topographical survey. In addition to WFP Ethiopia's investigations and design work, DFID, as part of their funding approval process, commissioned a Socio-Economic Study to investigate the overall impact bridging the Wabe-Shebele River would have on the greater community.

18. WFP carried out consultations with both the Regional Government, Regional Roads Authority (RRA) and the Disaster Preparedness and Prevention Bureau (DPPB) that they will undertake the rehabilitation of the approach roads to both the east and west sides of the proposed bridge. The approach roads account for approximately 23 km of access roads. WFP have a signed document summarising the minutes of meetings and agreements since March 2013 by the Bureau Heads of the RRA and DPPB regional departments. In addition WFP is in the process of obtaining a formal MOU with the Regional Government confirming the commitment to the rehabilitation of the approach roads and their ownership of the infrastructure post construction.
19. The SO will be managed by WFP Ethiopia. The WFP Ethiopia Head of Logistics will serve as the SO project manager. The WFP Ethiopia Head of Finance will serve as the funds administrator. The engineering unit in Ethiopia will select an international project manager and one site engineer to assist the implementation of the project. Internationally recognized contract standards (FIDIC) will be applied.
20. The project will be split into 2 separate components to be contracted separately: the civil works (excavation, foundation, drainage, approach roads, etc.) and the construction of the bridge structure itself.
21. The CO engineering team, with support from WFP Field Engineering, will provide the technical details and manage the internationally recruited project manager in the implementation of this project.
22. The project will be implemented in four phases as shown in the timeline chart below

Pre Contract	Procurement	August 2014 - October 2014
Phase 1	Ground Clearing & Leveling	November 2014- June 2015
Phase 2	Construction of civil works	February 2015 - July 2015
Phase 3	Supply & installation of modular steel bridge	June 2015 - September 2015
Phase 4	Finishing works and safety installations	August 2015 – September 2015
Phase 5	Defects Period (outside of project timeline)	One year after construction completion

### **Project Costs and Benefits**

23. The total project cost is budgeted at US\$ 4.1 million. The cost benefits analysis for this Special Operation project assumed annual savings between USD 245,000 to USD

623,000.<sup>2</sup> Additional socio-economic benefits are to be expected as indicated in the Socio Economic Study conducted by DIFID<sup>3</sup>.

### **Monitoring and Evaluation**

24. The Special Operation will undertake constant monitoring of the progress of works against the original schedule outlined in the Project Implementation section.

The Following KPIs will be used:

- % of works completed by quarter against original schedule
- % of overall costs against original budget

Although not directly related to the monitoring of this project, one year after completion, the CO will undertake an evaluation of both the cost savings assumptions and the socio economic improvements

### **Risks**

25. During the project initiation a full project risk assessment will be conducted and monitored/updates at bi weekly intervals for the duration of the project. Some of the major risks to be appraised and mitigation measures proposed for will include: contractor competence; reliance on government action for improving access roads; increment weather effects above those typical at the time of year: site access: progress quality and monitoring of construction, geotechnical, public and security. In terms of security over the recent years local defense forces have stabilized the area and the frequency of UN and NGO missions to the area has greatly increased. Refer to Appendix C for the Security Risk Analysis Matrix for the Fik Zone.

### **RECOMMENDATION**

26. This Special Operation covering a period from 01 September 2014 – 01 October 2015 at a total cost to WFP of US\$ 4,057,595 is recommended for approval by the Executive Director with the budget provided.

### **APPROVAL**

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Ertharin Cousin  
Executive Director

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<sup>2</sup> Please refer to Appendix B

<sup>3</sup> Please refer to attached supporting document “Rapid Assessment of Possible Impacts of DFID support to WFP construction of a Bridge at Geeldoh”