



## 1. Project Data

<b>Project ID</b> P055120	<b>Project Name</b> TZ-Transport Sector Support Project		
<b>Country</b> Africa	<b>Practice Area(Lead)</b> Transport & Digital Development	<b>Additional Financing</b> P126206,P126206	
<b>L/C/TF Number(s)</b> IDA-47240,IDA-49910	<b>Closing Date (Original)</b> 30-Jun-2015	<b>Total Project Cost (USD)</b> 281,700,000.00	
<b>Bank Approval Date</b> 27-May-2010	<b>Closing Date (Actual)</b> 20-Jun-2017		
	<b>IBRD/IDA (USD)</b>	<b>Grants (USD)</b>	
Original Commitment	270,000,000.00	0.00	
Revised Commitment	329,000,000.00	0.00	
Actual	320,608,489.77	0.00	
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## 2. Project Objectives and Components

### a. Objectives

#### Original objective

The project development objective (PDO) was “to improve the condition of the national paved road network, to lower transport cost on selected roads, and to expand the capacity of selected regional airports” (Financing Agreement dated June 11, 2010; page 4).

#### Revised objective

The PDO was revised slightly to reflect new activities added as part of an additional financing approved in June 2011 (over a year after the original project’s approval). The revised PDO was “to improve the condition of the national paved road network, to lower transport cost on selected roads and to Songo Songo island,



and to expand the capacity of selected airports” (Financing Agreement dated September 2, 2011; page 6). The revisions included reference to the addition of a component to rehabilitate a jetty on Songo Songo Island, and expansion of the third sub-objective to include an airport on Zanzibar, in addition to regional airports.

**b. Were the project objectives/key associated outcome targets revised during implementation?**

Yes

**Did the Board approve the revised objectives/key associated outcome targets?**

Yes

**Date of Board Approval**

30-Jun-2011

**c. Will a split evaluation be undertaken?**

No

**d. Components**

**1. Rehabilitation and Preparation of Designs for Rehabilitation of Paved Trunk Roads** (estimated US\$186.5 million; actual US\$191.7 million). The component included rehabilitation and provision of supervision services for the improvement of the Korogwe – Same and Arusha – Minjingu roads (approximately 270 kilometers) and preparation of design and bidding documents for about 911 km of additional paved trunk roads for future rehabilitation.

**2. Improvement of Regional Airports** (estimated US\$69.2 million; actual US\$56.5 million). The component included paving and rehabilitation of the runway at Kigoma regional airport, rehabilitation of the main runway at Tabora regional airport, and extension, rehabilitation and paving of the runway and replacement of the apron, terminal and car parking at Bukoba airport.

**3. Improvement of Road Safety Management** (estimated US\$6 million; actual US\$4.6 million). The component aimed to improve road safety management by establishing: (i) a National Road Safety Agency (NRSA); (ii) a Driver and Vehicle Examination and Licensing Agency (DVELA); and (iii) a Road Accident Information System (RAIS).

**4. Promotion of Public Private Partnerships (PPPs)** (estimated US\$5.0 million; actual US\$3.4 million). The component included (i) capacity building for the implementation of PPP projects; (ii) feasibility studies of potential PPP projects (including a Civil Aviation Master Plan and PPP feasibility assessments for the Tanzania Airport Authority (TAA) airports, a Freight Centre feasibility study, a study for removal of bottlenecks on local government roads, assistance to prepare a bankable central rail project); and (iii) provision of transaction advisors for projects found feasible.

**5. Emergency Road and Bridge Repair** (estimated US\$15.0 million; actual US\$13.9 million). Activities included emergency repair of parts of national roads and bridges damaged by floods at the time of appraisal at approximately 100 locations throughout Tanzania. In line with the World Bank’s Rapid Response to Crisis and Emergencies Guidelines (OP 8.00), this included retroactive financing of 40% of the component amount and accelerated, consolidated and simplified procurement and safeguards.



Revisions in components:

At the time of additional financing approved in June 2011, the following changes were made:

1. Civil works to improve the **Zanzibar International Airport** were added under Component 2 (estimated US\$57.0 million; actual US\$50.7 million). These included rehabilitation and extension of Zanzibar Airport's taxiways and apron. The improvement of Zanzibar Airport had already been planned and designed as part of an earlier World Bank -financed transport project (P103633).
2. **Component 6: Songo Songo Jetty Repair** (estimated US\$2.0 million; actual US\$2.2 million) was added to rehabilitate and extend the Songo Songo jetty. This was done as a social mitigation measure for the Bank's closed Songo Songo Gas Extraction Project (P002797). This project had taken over an existing jetty used by the local population, and had constructed a new jetty for their use. However, after the project closed, it was determined that the new jetty was not sufficient, submerging during high tides and becoming dangerously shallow during low tides.

**e. Comments on Project Cost, Financing, Borrower Contribution, and Dates**

**Project Cost.** The total estimated project cost was US\$281.7 million, which increased to US\$340.7 million to finance additional activities, i.e., rehabilitation of Zanzibar Airport and a Songo Songo Island jetty. The total cost was US\$325.1 million at closure.

**Financing.** The project was financed through an original IDA credit of \$270 million supplemented by additional financing in the amount of US\$59 million to a total commitment of US\$329 million. The IDA Crisis Response Window accounted for US\$15 million of the IDA contribution under Component 5: Emergency Road and Bridge Repair component. The IDA credits disbursed at US\$320.6 million.

**Borrower Contribution.** The Government of Tanzania (GoT) committed US\$11.7 million to the airport component. Its actual contribution was US\$4.5 million.

**Dates.** The project was approved on May 27, 2010 and effective six months later, on December 1, 2010. The original closing date of June 30, 2015 was extended twice by about 24 months to June 20, 2017. The additional financing was approved on June 30, 2011 to finance new activities. The PDO and the results framework were modified to reflect additional works. The project closing date remained the same at the time of AF but extended later in 2015 and 2017 through two project restructurings. The first extension for 21 months was from June 30, 2015 to March 31, 2017 to allow for completion of one of the project's road contracts, and to finalize some additional works under the road safety and Songo Songo jetty components. The second extension was for another three months to June 20, 2017 to complete the works at the Tabora airport, including paving of the second runway and apron and installation of Airfield Ground Lighting, and completion and furnishing of the Tumaini Primary school in Bukoba. During implementation, it was determined that a primary school was too close to the end of the runway at the Bukoba airport, and airport operations presented a threat to the students. To address this, an alternate school was constructed in a nearby safe location, and the original school demolished and land demarcated.

### 3. Relevance of Objectives



## Rationale

At appraisal, transport bottlenecks remained a key challenge for continued economic growth in Tanzania. The country had implemented a series of reforms in the transport sector, including delegation of regulatory and executive functions to autonomous authorities such as the Tanzania Airports Authority (TAA) and the Tanzania National Roads Agency (TANROADS), the creation of the Road Fund (an independent user-financed funding mechanism for road maintenance), and the focusing of the ministry responsible for the transport sector on policy setting and sector development. Only five percent of the national network was in poor condition, owing largely to the country's well performing Road Fund. Yet, there was still a backlog of rehabilitation on paved trunk roads, with 1,200 km estimated to be in urgent need of rehabilitation. Infrastructure deficiencies in the aviation sector had caused airlines to restrict and cancel flights to some regional airports.

The PDO remained relevant to the government priorities in the sector. Tanzania's transport was identified as a key bottleneck for development, highlighted explicitly in the "Growth Cluster" of the National Strategy for Growth and Reduction of Poverty 2005-2010 (known as MKUKUTA). MKUKUTA was developed to support the achievement of the country's long-term development strategy, the Tanzanian Development Vision 2025 that outlines key goals for reaching middle income status and highlights the need for infrastructure, with a focus on road transport. A National Transport Policy guided the investments in the sector. The current plan, *National Five-Year Development Plan 2016/17 – 2020/21*, continues to highlight the need for transport infrastructure.

The PDO remained aligned with the World Bank's country strategy at closure. The progress report to the Country Assistance Strategy (CAS) for the period of FY12-FY15 continued its focus on transport infrastructure, reducing transport costs and crowding in private investment through PPPs. A Systematic Country Diagnostic prepared in 2017 to guide the development of a new strategy highlighted the continued need for transport investments, identifying a specific priority area to strengthen rural-urban connectivity through enhanced rural transport and market linkages between villages and secondary cities, among others.

## Rating

High

## 4. Achievement of Objectives (Efficacy)

### Objective 1

#### Objective

To improve the condition of the national paved road network.

#### Rationale

IEG does not apply a 'split rating' assessment as the scope of the PDO was slightly expanded to include new, but similar activities (i.e. "more of the same") and the related outcome indicators were revised upwards.

#### Outputs



- 268.4 km of the national paved roads were rehabilitated (172 km on Korogwe-Same road and 96.4 km on Arusha-Minjingu road), against the targeted 270 km. The Korogwe-Same road is part of the North- East Corridor, the major road link between Dar es Salaam, the economic activity and tourist destinations in the North, and to Nairobi. The Arusha-Minjingu road makes up part of the great African North-South axis, from Cairo to Cape Town, while also being vital to the tourism industry linking the Serengeti and other national parks with Arusha and the Kilimanjaro International Airport.
- Emergency maintenance was carried out on 641 km of roads, 212 culverts and 2 bridges in 19 of 31 regions (109% of the target).
- The Road Accident Information System (RAIS) system to identify blackspots was established and is operational, as planned. The RAIS allows the police to enter road crash information into a national database for use by transport planners, TANROADS, and police speed enforcement.
- Two organizations- the National Road Safety Agency (NRSA) and the Driver and Vehicle Examination and Licensing Agency (DVELA)- were not established, as planned. Their creation required the passage of a Road Safety Act in Parliament, which did not pass, due largely to a lack of coordination among relevant agencies and potential disagreement on responsibility for road safety among various ministries and agencies.
- Approximately 140 representatives of relevant agencies were trained in PPP aspects and a working manual was developed. A feasibility study and design were developed for a potential 140km toll road (Dar es Salaam to Chalinze), which reached the bidding stage at project closure. The target was to have two PPP transactions that would have reached bidding stage.

### Outcome

The share of total classified road network in good or fair condition increased from 66% in 2008 to 86% at project closure in 2017, above the targeted 70%. The contribution of the project to this improvement was, however, minimal, and this was part of a larger series of engagements between GoT and various development partners in the road sector. The ICR notes that it is difficult to assess the actual achievement due to inconsistency in the measurement of this indicator. At appraisal, the length of the classified road network was 86,472 km, and consistently the definition was informally changed, with reported condition data reflecting only the national and regional roads (approximately 30,000 km) resulting from unreliable data on local roads (ICR, page 25). Overall, the ICR estimates that the contribution of the project would represent one percent of the improved national paved road network in line with the project rehabilitation works targets (or increase from 75% to 76% of national paved roads in good condition). The number of direct beneficiaries or users of the transport facilities was estimated at 6 million, above the original target of 5.15 million and the revised 5.7 million (reported 50% female, which is a rough estimate).

### **Rating**

Substantial



## **Objective 2**

### **Objective**

To lower transport costs on selected roads and to Songo Songo Island.

### **Rationale**

#### Outputs

- Outputs as described above under Objective 1.
- A jetty was rehabilitated on Songo Songo Island as planned.

#### Outcome

The achievement of the objective was measured through reduction in vehicle operating costs (VOC). On the Korogwe-Same road section, the average VOC decreased from US\$ 0.34 in 2009 to US\$0.22 per km achieving the target of US\$ 0.23 per km. On the Arusha-Minjingu road, the average VOC reduced from US\$ 0.45 per km in 2009 to US\$ 0.27 per km, as compared to the targeted US\$ 0.25 per km.

The ICR reports that no specific data is available for Songo Songo island's transport costs. The project investments enabled continuous transport service to the island, addressing the existing jetty's inoperability during high and low tide. During these periods, alternate means of transport were necessary which were less efficient and more costly.

### **Rating**

Substantial

## **Objective 3**

### **Objective**

To expand the capacity of selected airports.

### **Rationale**

#### Outputs

- At Bukoba regional airport, a runway was paved, taxiway and apron were improved; a new terminal building was constructed; access roads and parking were constructed among other more minor works (these investments comprised the largest share of expenditure (37%) of the project-financed works).
- At Tabora regional airport, a runway was paved; the taxiway and apron were rehabilitated.
- At Kagoma regional airport: the main runway was paved.
- At Zanzibar Airport, which is the main gateway to one of Tanzania's most important tourist destinations-



Zanzibar and its Stone Town (a UNESCO World Heritage Site), runways were paved, and airport taxiways and apron were rehabilitated and extended.

- Tanzania's Civil Aviation Master Plan was developed under the project, as planned.

### Outcome

The expansion of the capacity of selected airports was measured through an increase in passenger volume at three regional airports and at Zanzibar airport. In aggregate, the target for annual passenger traffic was overachieved: 1.26 million in 2016 versus the revised target of 764,000 passengers per year (the original target of 104,000 was revised upwards due to the addition of works at Zanzibar Airport). However, the aggregate number was largely a result of the significant increase of the passenger volumes at Zanzibar airport, while passenger targets were significantly below the targets in two out of four airports by project closure. At the same time, the ICR notes that the number of passengers per year is heavily dependent on other factors outside of the airport's control, such as passenger demand, airline operations, and economic growth.

- At Bukoba airport, the number of annual passengers increased from 26,628 in 2009 to 33,138 in 2016 (target 34,000). As reported by the ICR, it is likely to reach its target once the final 2017 data is available. After the project, the airport was assessed for Aerodrome Reference Code of 2C, able to accommodate the ATR-42 being commonly used for commercial service in Tanzania.
- At Kigoma airport, the volume of passengers remained almost the same as at appraisal, i.e., 29,781 as compared to the baseline of 28,859; this was well below the targeted 40,000. One of the reasons for this low volume of passengers might be that traffic through Kigoma had been largely driven by refugee operations near the town. In addition, at project approval, the airport was being used to supply UN forces stationed in the Democratic Republic of Congo. After 2009 these supply runs were moved to the Entebbe airport in Uganda. According to Tanzania's Civil Aviation Master Plan developed under the project, future projections indicate a 7.1% growth on average. The ICR adds, reflecting the capacity to handle larger flights, the number of passengers per flight has risen from 14.7 in 2009 to 23.9 in 2017.
- At Tabora airport, the passenger volume fell below the pre-project level due to on-going works., i.e., from 22,912 in 2009 to 16,505 in 2016. Due to delayed completion of rehabilitation works under the project, full testing and operationalization was expected to be completed by the end of 2017. According to the information received subsequently from the project team, this was delayed and the final commissioning and official launch of 24-hours operations was expected before end of June 2018. The traffic is expected to grow by an estimated 4% per year from a 2015 baseline. The ICR adds that the number of passengers per flight to increase slightly, from 10.1 in 2009 to 11.1 in 2017.
- At Zanzibar Airport, annual passenger volumes increased from a baseline of 500,000 passengers in 2011 to 946,905 in 2016, significantly overachieving its target of 660,000 passengers. The ICR points that the target had already been met at Zanzibar Airport by the time works began.





**Rating**  
Modest

### **Rationale**

Two sub-objectives related to improving the condition of the road network and reducing transport costs are assessed as substantially achieved. Most of the outputs were carried out as planned, with the exception of the institutional re-organization targets, and the outcomes were achieved. The third objective on expanding the capacity of selected airports is assessed as modestly achieved. While the planned works were carried out at the four airports, the achievement of the overall outcome target on increase in passenger volume was driven by Zanzibar Airport, while the actual numbers for two regional airports were close to the baseline level. On balance, taking into account the project results, the overall efficacy rating is substantial.

**Overall Efficacy Rating**  
Substantial

## **5. Efficiency**

### **Economic analysis**

An economic internal rate of return (EIRR) was estimated for the main project investments: (i) rehabilitation of two trunk roads (172 km from Korogwe to Same, and 98 km from Arusha to Minjingu), and (ii) rehabilitation of three regional airports at Bukoba, Kigoma and Tabora.

#### Roads

The economic analysis for roads was based on HDM-4 that computes the expected road user cost savings resulting from road improvement. The same methodology was applied comparing investment costs, traffic counts, and vehicle operating cost parameters at appraisal and project closure. The ex-post IRR for Korogwe–Same Road was estimated at 17.1%, slightly lower than the ex-ante IRR of 19.5% (weighted average for two road sections of Korogwe-Same Road). While the traffic is generally consistent with the projection, the rehabilitation work costs increased by nearly 50%, which reduced efficiency in investment. For Arusha – Minjingu Road, the ex-post IRR was estimated at 16.3%, slightly higher than the ex-ante IRR of 15.2%. The rehabilitation costs increased by 22%, but the traffic also increased substantially along this road.

#### Airports

For the regional airports, the economic analysis at the appraisal stage focused on economic values that additional passenger and cargo traffic could bring in. The economic analysis at appraisal took into account the following benefits: (i) spending by additional tourists and business persons, (ii) value added to additional freight cargo, (iii) growth impacts, including new jobs and agricultural production; and (iv) airport service revenue. The ex post assessment followed the similar approach but excluding growth impacts, since the underlying





assumptions were not clear in PAD (ICR, page 49). The appraisal assessment assumed significant and steady growth in both passengers and cargo.

For Bukoba Airport, the ex-post IRR is estimated at 18.3% with an NPV of US\$6.7 million that is higher than the ex-ante IRR at 15% due to its growth of traffic and slightly lower costs but that had a higher NPV of US\$20.6 million. For Kigoma Airport, the ex-post IRR is 8.5% with a negative (-) NPV of US\$4.2 million as compared to an ex-ante estimated at 23% and an NPV of US\$42.1 million; the traffic at project closure remained modest but the actual costs were lower than expected. For Tabora Airport, the ex-post IRR is estimated to be negative (-) 9.6%, as compared to the ex-ante of 15% and an NPV of US\$22.2 million. The passenger and cargo traffic at project closure were significantly lower than expected (below pre-project levels) due to the prolonged works on runways and taxiways that restricted airport services.

The ICR does not provide IRR estimates for Zanzibar Airport, which was added at AF. The Project Paper indicates that the ex-ante IRR for Zanzibar airport was estimated at 12.3%, with a positive NPV of US\$198.23 million at a discount rate of 12% (Project Paper, 2011, page 6).

#### *Cost effectiveness*

The works costs were initially estimated at US\$81 million for Korogwe–Same and US\$47 million for Arusha–Minjingu Road. The actual costs turned out higher than estimated: US\$119 million and US\$58 million, 47% and 22% cost overruns, respectively. The ICR says that they were in line with other roads in the region constructed during the project period but without specific reference to projects or countries. The project team subsequently clarified that unit costs were comparable for similar works and roads in Uganda. The airport components were constructed at significantly less cost than estimated during appraisal, with the remaining funds used to expand the planned works (in Tabora especially).

There were significant failures and major deformations in pavement after completion of road works, resulting in additional costs (ICR, para 58). In Tabora, the original pavement design was based on an assumption that the airport would be fully closed during construction. As it was only partially closed, issues arose in the pavement used for the first half of the runway, with aircraft causing some damage to the freshly laid pavement.

#### *Operational efficiency*

The project was extended twice to allow for project activities to be completed, leading to additional supervision costs. Although economically justified based on its ERR, delays and additional costs arose from procurement, design errors, and disagreement over responsibility for remedial road works.

## **Efficiency Rating**

Modest

a. If available, enter the Economic Rate of Return (ERR) and/or Financial Rate of Return (FRR) at appraisal and the re-estimated value at evaluation:

	Rate Available?	Point value (%)	*Coverage/Scope (%)
Appraisal		0	0 <input type="checkbox"/> Not Applicable
ICR Estimate		0	0 <input type="checkbox"/> Not Applicable



\* Refers to percent of total project cost for which ERR/FRR was calculated.

## 6. Outcome

Relevance of objectives is rated high. The project achieved its objective to a substantial extent, to improve the condition of the national paved road network, to lower transport cost on selected roads and to Songo Songo island, and to expand the capacity of selected airports. Efficiency is assessed as modest. There were satisfactory internal rates of returns under the road component, albeit significant cost overruns; the internal rates of return under the airport component were in a lower range, with negative estimates for Tabora airport. Operational efficiency was weak for delays and additional costs that arose from procurement, design errors, and disagreement over responsibility for remedial road works. With high relevance, substantial efficacy, and modest efficiency, the overall outcome rating is moderately satisfactory.

### a. Outcome Rating

Moderately Satisfactory

## 7. Risk to Development Outcome

Roads O&M. Established by Parliament, the Road Fund provides stable revenue, collected from fuel levies and other road user fees, to ensure sustainable maintenance of the road network. With revenues increasing year over year for a 2016/2017 fiscal year total of nearly US\$350 million, the Fund is well placed to maintain the country's growing paved road network.

Airports. The key risk is a lack of clarity on responsibility and resources for maintenance. Maintenance budgets are not guaranteed, and proper resources may not be available to maintain the airport infrastructure. Although aviation generally generates revenue, Tanzania does not have a set percentage to be retained by the airports for operations and maintenance, with airport budgets allocated from a central account based on annual requests. In Zanzibar, a percentage is retained for maintenance, but it is insufficient to meet maintenance needs.

## 8. Assessment of Bank Performance

### a. Quality-at-Entry

The project was prepared as part of a much larger government program (TISPP) involving various development partners. The project leveraged various agencies and Ministries from across the GoT. This necessitated effective engagement with a variety of stakeholders during preparation, establishing a strong implementation framework for the project.

There were significant shortcomings at entry. The project suffered from a number of technical oversights during preparation, which led to delays in implementation and additional costs. Due to a short preparation



time, some of the project components struggled through implementation as a result of poor or incomplete designs, necessitating a series of changes within nearly every component. For instance in Bukoba, better planning could have identified the need to relocate the primary school, pavement issues which arose in Tabora, incorrect volumes of materials specified for the Korogwe-Same road. In addition, the poor quality of the M&E framework created a challenge for the project throughout its life, as reported by the ICR.

### **Quality-at-Entry Rating**

Moderately Unsatisfactory

### **b. Quality of supervision**

The Bank team was based in Dar es Salaam that allowed for a close working relationship with the implementing agency, and for rapid response to evolving challenges. This enabled the team to stay engaged with the implementing agencies on a regular basis, helping to mitigate any potential issues with lack of coordination or cooperation and providing ready support as needs arose. The project team could overcome the initial challenges resulting from weaknesses in preparation, including the design and construction of the school in Bakoba. Project documentation and ISRs was filed appropriately, with ISRs and a Mid-Term Review completed as expected.

There were some outstanding issues at project closure related to social safeguards (see Section 10). Also, the M&E was not improved during the life of the project, despite an additional financing and several restructurings.

### **Quality of Supervision Rating**

Moderately Satisfactory

### **Overall Bank Performance Rating**

Moderately Satisfactory

## **9. M&E Design, Implementation, & Utilization**

### **a. M&E Design**

The project's theory of change logically flows from activities to outputs to outcomes, however its indicators did not measure aspects strongly tied to the project achievement. There were three PDO indicators linked with each sub-objective. The PDO indicators suffered from either poor attribution to the project or an inability to be assessed during implementation, eliminating their use as a feedback mechanism to implementation, as noted by the ICR. The indicators such as condition of the road network and airport passenger data are largely driven by forces outside of the project, while vehicle operating costs were only intended to be assessed at project design and ICR. Intermediate indicators are largely of the "yes or no" variety, tracking whether subcomponents are completed.



The ICR assesses that in the case of the PPP component, the associated intermediate indicator was poorly matched to the scope of the works. Due to Tanzania's nascent PPP market and the relatively small size of the component, establishing the indicator of number of transactions to reach bidding stage was overly ambitious, and provided some incentive to try to bypass the very necessary steps of capacity building to move on to transaction identification and bidding.

### **b. M&E Implementation**

TANROADS was responsible for collecting and aggregating Results Framework data for the project. It provided biannual updates through the implementation of the project, reporting on project works and indicator status. This arrangement worked well, with data collected from TAA, the Ministry of Works, Transport and Communication, and the Government of Zanzibar, and provided in aggregate to the World Bank team.

### **c. M&E Utilization**

The project's results framework was used as a checklist during implementation, allowing the project team and implementing agency a way to formally track progress of outputs. The results framework, however, was not designed in such a way as to inform or improve implementation.

### **M&E Quality Rating**

Modest

## **10. Other Issues**

### **a. Safeguards**

The project was classified as category B under environment assessment OP 4.01. Two more safeguard policies were triggered: Physical Cultural Resources (OP 4.11) and Involuntary Resettlement (OP/BP 4.12).

*Environmental Assessment.* The ICR (page 26) reports that the project's environmental management was satisfactory. All sub-projects under Components A and B (those including major civil works) were subjected to Environmental and Social Impact Assessments (ESIAs), which concluded that all potential impacts could be mitigated through implementation of Environmental and Social Management Plans (ESMPs), which were generally adhered to during project implementation, as reported by the ICR. Deficiencies detected during implementation were addressed. At project closure, the only environmental measure still to be completed was verification that all asbestos were removed from the site of the former Tumaini primary school. While all visible materials had been removed, final verification through soil testing had not yet been completed at project closure, and as the project team subsequently informed the verification and certification mission for the soil contamination was expected to be conducted by the National Environmental Management Council (NEMC) on May 15.



*Involuntary Resettlement.* The project required resettlement under Component B. Under the airport component, Resettlement Action Plans (RAPs) were prepared for all airports, although no resettlement was required at Tabora and Kigoma. In Bukoba, five resettlement cases remained pending at project closure. Four of the cases were pending court deliberations, with the fifth resolved through the project's Grievances Redress Mechanism with payment of the entitlement agreed and pending from the TAA. The TAA agreed to continue submitting project progress reports to the Bank until the remaining cases were resolved. The project team subsequently informed that high court cases on RAP implementation were ruled and payment of compensation to the PAPs was being processed. Resettlement was also required at the Zanzibar airport, and satisfactorily completed, as per the ICR. Under component A, the road lengths were completed within existing alignments and no resettlement determined to be required. During implementation, a request for relocation was received from several families living near an existing quarry utilized by the Arusha-Minjingo contractor. Their request was fulfilled and they were satisfactorily relocated (ICR, page 27). During implementation, it was determined that the Tumaini Primary School was located within the flight path of the extended runway. A public primary school, Tumaini serves students from the area around the airport, including hosting a unit serving more than 50 disabled children. When the risk was identified, the airport was put under a flight restrictions, with operations only allowed in the opposite direction of the school. To address this concern it was determined that the school would have to be relocated. Empty land was contributed by the local government and a new school buildings were constructed. Both students of the former school and new students began attending classes in the new location. Although there were some students whose commute was made more challenging, the move was largely satisfactorily.

*Physical cultural resources.* The project was expected to secure the services of an archeologist to assess any chance finds. While no archeologist was secured, as very little undisturbed land was utilized, no chance finds were identified during construction. At the Zanzibar airport expansion of the taxiway necessitated relocation of a cemetery. This was satisfactorily implemented, as reported by the ICR.

## **b. Fiduciary Compliance**

*Financial Management.* The ICR reports that the project's financial management was satisfactory. During preparation, TANROADS was identified as the agency best placed to handle all fiduciary responsibilities for the project. A World Bank financial management specialist based in the Tanzania country office supported the project through implementation. Reporting was provided on a timely basis and all audits were unqualified.

*Procurement.* The ICR reports that the project's procurement performance was satisfactory. As institutional capacity was identified during preparation as a potential risk to implementation, the project required the hiring of three additional procurement staff within TANROADS. In addition, as the roads sector in Tanzania had been plagued with higher than expected bids, the team developed standardized bidding documents and



waived requirements for pre-qualification, expanding the pool of potential contractors and leading to bids significantly lower than expected in many cases.

### c. Unintended impacts (Positive or Negative)

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### d. Other

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## 11. Ratings

Ratings	ICR	IEG	Reason for Disagreements/Comment
Outcome	Moderately Satisfactory	Moderately Satisfactory	---
Bank Performance	Moderately Satisfactory	Moderately Satisfactory	---
Quality of M&E	Modest	Modest	---
Quality of ICR		Substantial	---

## 12. Lessons

Four lessons are taken from the ICR with some modification of the language:

- **Establishing standardized bidding processes and removing requirements for prequalification can create a more competitive bidding process and result in lower costs.** Earlier World Bank transport projects in Tanzania had increasingly high bids for civil works that sometimes necessitated cancellation of bidding processes by the Bank. By streamlining the bidding documents and standardizing relevant sections, as well as carrying out bidding without prequalification, the number of bidders was greatly increased, with bids received from contractors from a wide range of countries. The increased competition drives down the costs of received bids.
- **Well-designed airport master plans help avoid fragmentation of activities and issues with safeguard implementation.** Under this project's aviation component, there were many issues that could have been avoided if better planned. This relates to issues in Zanzibar (poor integration with a separate project being financed by the China Exim Bank). In Bukoba, better planning could have identified the need to relocate the



primary school. In addition, security fencing was not included in the original designs of the regional airport, but during implementation it was determined that residents of the local areas were crossing through the airport area.

- **It is essential to include road safety into road project design to avoid treating it as an afterthought.** During the remediation activities on one project-financed road section, the road safety measures were removed from this part of the project's road works. As safety was not identified as a key objective of the project, and the safety of the road lengths was not monitored under the project, there was little incentive for the contractor to retain these measures. Furthermore, identification of safety as a priority during road design and identifying pedestrians as road users equal to those in vehicles may have encouraged road designs to incorporate footpaths or wider shoulders in areas with settlement. As such road safety works are being more frequently included in recent World Bank road projects, additional attention should be given to older, legacy projects under supervision.

- **Consultations with those living in the area around an intervention can be vital, both during preparation and supervision.** The project-financed Arusha-Minjinga road runs through an area frequently used by nomadic Maasai herdsman. As the road had the potential to impact their animal's ability to move between grazing areas, the contractor did significant consultations and provided signage and earthworks in identified areas to improve the safety and ease of herds crossing the road. In Bukoba and Tabora, the airport works blocked walking paths traditionally used by local residents. To ease their travel, and prevent the safety risk of their incursion into the airports, the impacted residents were involved in planning an alternate path to be constructed by the project. In both cases, users expressed appreciation for the new routes.

### 13. Assessment Recommended?

No

### 14. Comments on Quality of ICR

The ICR presents a candid, well written and argued self-assessment of implementation experience. It provides an insightful analysis of issues that affected project implementation. The ICR is outcome-oriented and provides additional evidence in support of the achievement of the project objectives. The M&E section candidly discusses weaknesses in the M&E design, implementation, and utilization. The ICR offers good account of issues and compliance with safeguards triggered by the project but it does not specifically state the compliance. Lessons are rich and based on evidence. Annex 4-Efficiency Analysis provides adequate detail but should have included the justification of omitting the ex-post IRR estimation for





Zanzibar Airport. A minor editorial note: the date of the ICR should be as of 2018 on the front page, not 2017.

**a. Quality of ICR Rating**  
Substantial