

Annex B

Public Participation Process

B1 PUBLIC PARTICIPATION PROCESS

This Annex describes the process followed to date and summarises the key issues raised. Please refer to Appendix 1 for a complete record of minutes of meetings that were held for the Project to date.

B1.1 PROCESS FOLLOWED TO DATE

The overarching objective of this consultation process was to ensure that key stakeholders were informed of the proposed Project and provided with an opportunity to provide comments, ask questions, or raise concerns.

The specific objectives included: (i) provide the identified stakeholders with clear information on the project; (ii) collect feedback regarding the overall design of the project or potential environmental and socio-economic issues related to the potential implementation of the Project; (iii) collect information for the development of the Terms of Reference for the EIA.

B1.1.1 Identification of Stakeholders

The first step of this public consultation was the definition of which stakeholders should be involved in this stage of the project. Starting from the stakeholders previously identified from the pre-project Stakeholder Engagement meetings, a list of stakeholders was developed, including the following:

Tete

- Provincial Government; Provincial Directorates; Coordination of Environmental Affairs (DPCA); Public Workings and Housing; Tourism (Conservation Areas Department); Agriculture; Mineral Resources (DPREME); Energy; Transport and Communication; Industry and Commerce, Wildlife and Forestry
- Government Institutes: ARA-Centro & ARA-Zambeze; Fisheries (IIP, IDPPE)
- Municipality of Tete and Moatize, Government of the District of Moatize
- Tete Province Riverine Districts and Administrative Posts
- EDM, National Administration of Roads (ANE), Mozambique Railways Company (CFM), GPZ
- Non Governmental Organisations (NGOs): WWF, IUCN

Beira

- Provincial Government; Provincial Directorates: Coordination of Environmental Affairs (DPCA); Public Workings and Housing; Tourism (Conservation Areas Department); Agriculture; Mineral Resources (DPREME); Energy; Transport and Communication; Industry and Commerce, Wildlife and Forestry
- Government Institutes: ARA-Centro; Fisheries (IIP, IDPPE), National Meteorological Institute (INAM)
- Municipality of Beira; Sofala Province Riverine Districts and Administrative Posts
- EDM, National Administration of Roads (ANE), Mozambique Railways Company (CFM), Cornelder, Emodraga, Companhia de Sena, Carr Foundation (Gorongosa National Park)
- NGOs: WWF, IUCN
- Universities

Quelimane

- Provincial Government; Provincial Directorates: Coordination of Environmental Affairs (DPCA); Public Workings and Housing; Tourism (Conservation Areas Department); Agriculture; Mineral Resources (DPREME); Energy; Transport and Communication; Industry and Commerce
- Government Institutes: ARA-Centro & ARA-Zambeze; Fisheries (IIP, IDPPE)
- Municipality of Quelimane
- Zambézia Province Riverine Districts and Administrative Posts
- EDM, National Administration of Roads (ANE) Quelimane Delegation and Mozambique Railways Company (CFM)
- NGOs: WWF, IUCN
- Universities.

Maputo

- Ministries and National Directorates: Coordination of Environmental Affairs (MICOA); Planning and Development; Public Workings and Housing (National Directorate for Water); Tourism (National Directorate of Conservation Areas); Agriculture; Mineral Resources (MIREM);

Transport and Communication (MTC); Industry and Commerce; Energy / UTIP

- Government Institutes: Fisheries (Maritime Administration, IIP)
- EDM, Mozambique Railways Company (CFM) and National Administration of Roads (ANE), Hidroeléctrica de Mphanda Nkuwa (HMNK), GPZ
- NGOs: WWF, IUCN; Justiça Ambiental
- Universities.

B1.1.2 Consultation Meetings

Four consultation meetings were held in Tete (April 2.), Beira (April 5), Quelimane (April 6) and Maputo (April 8).

In preparation for the meetings, invitations were sent to identify stakeholders via e-mail, fax and posts, followed by phone confirmations. Adverts were also published, according to legal requirements, in nation-wide newspapers (Notícias and Diário de Moçambique)

The Team included: Victor Hugo Nicolau (Impacto) Kamal Govender (ERM), Jennifer Garvey (RML), Phil Tanner (RML) and Anthony Martin (RML) (in Maputo only)

The overall structure of the meetings comprised a presentation of the Project's technical detail and a presentation of the Environmental and Social process to be followed. A plenary discussion and question and answer session followed, whereby attendees were allowed to ask questions of clarification, make comments and raise any concerns.

All meetings were held in Portuguese. Whenever necessary, the questions and answers would be translated between Portuguese and English to make sure that both stakeholders and RML had a full understanding of the issues under discussion.

B1.2 SUMMARY OF ISSUES RAISED

Tete

- Possible impact of dredging on the historic and ongoing data collection by ARA-Zambeze at the hydrological stations along the river.
- Possible impact of dredging on the Zambezi effluents and on sedimentation patterns at the delta.
- Possible environmental and socio-economic impacts of coal dust generated during Project operations.
- Benefits to be granted to riverine populations affected by the Project.

- Possibility of investing heavily in railway infrastructure in order to avoid river transport.
- Impacts of the project on the livelihoods of riverine communities, especially on fishing activity.
- Necessity of taking into account Mozambique's international obligations, since the Zambezi is an international river.
- Necessity for water quality monitoring, should the Project commence.
- Impact of the project on river-based tourism activity.
- Compatibility of the barging project with other possible projects, namely the building of Lupata Dam, downstream Benga.

Beira

- Noise produced by passing convoys can be a disturbing factor not only for humans but also for several species inhabiting the river.
- The Project can have an impact on the Marrromeu reserve. The Director of Marrromeu reserve must be involved in the search for measures to ensure the protection of this important conservation area.
- Erosion is a huge problem in the Zambezi valley. Dredging and traffic can further aggravate the problem. Machambas on the banks and margins can be affected.
- Risk of accidents involving convoys and existing river traffic. Signage must be provided.
- The selected technology for transloading must be carefully evaluated. Grabs have a high risk of spillage. Vacuum methods should be considered.
- Local populations will not benefit from the project. Support and compensation measures must be studied.
- Dredging and coal falling into the water can affect mangroves and the shrimp production of Sofala Bank, the country's most important fishing site.
- Projects' impact on migrating birdlife must be evaluated.
- Land-based transport options should be further considered. Economic viability studies must be produced for all options.
- The dumping of dredged material must be carefully considered, especially with respect to affects on benthic fauna.
- Volumes to be dredged should be made clear.

Quelimane

- Need to implement navigation safety rules and procedures, in order to avoid accidents with other river traffic.
- Possible conflict with hydropower projects.
- Possible implications for political decision involving the Malawi Shire River project.
- Coal dust emissions during loading, transport and transloading as a possible source of air pollution.
- Coal spillages are a possible source of water pollution. There needs to be adequate anti-spillage measures.
- Barging traffic as a potential accelerator for erosion on margins and islands.

- Noise produced by passing convoys can be a disturbing factor for some animal species, that can feel compelled to abandon their current habitats.
- Possible contamination of river by fuel and oil spillages.
- The impact of the railway option is less significant than the impact of barging. Investment in railway structure should be viewed as a preferred solution, instead of investment in barging. The river is a vital resource for the livelihood of riverine communities and must be left undisturbed.
- Extreme caution must be exercised in preserving mangroves in the Zambezi delta, as they are important nurseries for shrimps captured in the Sofala bank.
- The possibility of use renewable energy sources to operate the pushboats and tugboats must be investigated.
- The impact of dredging on the erosion patterns must be investigated.
- Socio-economic impacts of the Project in the Zambeze valley must be investigated. Micro-economic studies must be carried out.
- Local universities should be included in the monitoring process.
- Clarification is needed on how climate change could affect the Project and on whether coal will be stockpiled at Chinde.
- Technical inspections for the barges, pushboats and tugboats must be rigorously performed.

Maputo (including issues raised by Justiça Ambiental after the meeting)

- Potential effects of climate change on the project must be taken into account, since extreme drought or extreme flooding situations might affect the Project's viability;
- Acceptable levels of confidence in the hydrological model should be defined for decision making.
- Need to define what kind of measures will be implemented to compensate riverine communities for disruptions of their river-related activities.
- The Moatize coal has a considerable quantity of ash. Efficient methods of preventing ash from reaching the river must be studied.
- Need to define what kind of monitoring measures will be implemented to verify the projects' impact on water quality.
- Need to define how many spots will be dredged and quantities of sediments to be removed.
- Need to assess increase on water turbidity due to dredging operations.
- MICOA and UEM, in partnership of WWF, are preparing a Zambeze Delta Management Plan. Need to coordinate the Project with Plan, after Plan is approved by relevant authorities.
- Cumulative impacts must be considered.
- Barging project can be conflicting with hydropower projects, irrigation projects and water supply projects. Thus there needs to be an agreement between RML, Cahora Bassa and Mphanda Nkuwa, to prevent future conflict induced by possible reduction in flows due to climate change.
- It is essential to observe SADC Protocols on the Zambeze, since it is an international river.

- The National Institute for Natural Calamities Management (INGC) has implanted Risk Management Committees along the Zambeze Valley. Those Committees must be involved in the project.
- Fishing communities along the river will be severely affected. Need to study alternatives for those who might be forced to stop fishing.
- There is an ongoing work of rehabilitation of the Zambeze delta from the negative impacts provoked by Cahora Bassa; this work can be hampered by the cumulative impact of the barging project.
- The “behaviour” of the Zambeze must be taken into consideration. It’s a very errant river, and the main channel shifts its position. This will make dredging a very difficult and expensive operation.
- The convoys will mean more people (the convoy crews) sailing along the river and stopping in some points (Dona Ana, Chinde). There is thus a need to engage in AIDS awareness and prevention programmes.
- Three alternatives were presented for the coal transport: Sena line, Nacala and the barging project. Other options should be considered, such as a new railway line and a new port in Zambézia Province.
- Clarify whether the channel is solely for RML’s use or will it be open to other transporters.
- Strategic Plan for Zambezi Delta specifies that dredging is not allowed in the delta (Plan submitted to Government perusal but not yet approved)
- Transport in open barges will be a serious risk. Wind patterns must be studied.
- Specific study of possible impacts in hippo and crocodile populations is needed.

B1.3

TECHNICAL STAKEHOLDERS MEETINGS

In October 2010 four focus meetings with relevant technical stakeholders were held in Quelimane (25 October 2010), in Maputo (26 October 2010) and in Tete (two meetings, 28 and 29 October 2010). In preparation for the meetings, invitations were sent to identified stakeholders via e-mail, fax and posts, followed by phone confirmations.

The Team included Victor Hugo Nicolau (Impacto) Kamal Govender (ERM) and Phil Tanner (RML). The overall structure of the meetings comprised a presentation updating the Project’s technical detail and the Environmental and Social process to be followed. A plenary discussion and question and answer session followed, whereby attendees were allowed to ask questions of clarification, make comments and raise any concerns.

Technical stakeholders attending the meetings were as follows:

- Quelimane: Inahina, DPCA
- Maputo: DPCA, Inahina, Justiça Ambiental (JA), WWF, Centro Terra Viva.
- Tete: GPZ, DPCA, ARA Zambeze

Quelimane

- Possible contamination due to coal and fuel spillages.
- Possible inclusion of Mozambican technical personnel in a case-study visit to an operational barging project elsewhere in the world in order to enable them to verify in situ impacts of such projects.
- Need to observe not only social responsibility policies but also environmental responsibility policies.

Maputo

- Dredging should be minimized as possible.
- Need to ensure transparency of the process and release relevant technical information for public scrutiny.
- Need to further explore the railway option, which is perceived as less disruptive from an environmental perspective.
- Need to take into account other river uses and other projects to be developed on the Zambezi, namely hydropower projects.
- Need to guarantee ecological flows, bearing in mind that dredging has the potential to interfere with flows. Current ecological flow plus dredging will probably no longer be an ecological flow.
- When building infrastructure at Chinde, mangroves need to be preserved. Also, measures to prevent a population influx to the northern margin, opposite Chinde, must be contemplated.
- Option for use of non-covered barges increases need to study wind regime in the Zambezi Valley, which is prone to cyclones and strong winds.

Tete

- Need to study how the river will be transformed by the project overtime, namely in terms of water quality.
- Need to carefully assess the impacts of the project on river fauna.
- Need to consider impact of future hydropower projects on the river flow, namely on dredging requirements.
- Need to maintain open communication channels between Riversdale and the Mphanda Nkuwa consortium.
- Need to contemplate the possible need of diverting water from the Zambezi to other river basins and the implication of that option on the project.
- Need to ensure that deposition of dredged material will not have a negative impact on riverine species reproduction.
- Need to ensure that dredging activity will not increase water turbidity so as to affect fish populations.
- Need to involve more entities (such as universities, research institutions and the National Directorate of Water – DNA in technical stakeholders meetings.

The objective of this consultation round was to ensure that Interested and Affected Parties (IAPs) could be informed about the conclusions of the ESIA draft report and provided with an opportunity to air their views regarding such conclusions.

The specific objectives included: (i) make the draft EIA report public and submit it to public scrutiny; (ii) collect feedback regarding the overall conclusions of the EIA, including identified impacts and mitigation measures; (iii) incorporate final comments and/or recommendations prior to issuing the final EIA report and submit it to MICOA.

B1.4.1

Stakeholders identification

Starting from the stakeholders previously identified for the pre-project Stakeholder Engagement meetings, a list of stakeholders was developed, including the following:

Tete

- Provincial Government; Provincial Directorates; Coordination of Environmental Affairs (DPCA); Public Workings and Housing; Tourism (Conservation Areas Department); Agriculture; Mineral Resources (DPREME); Energy; Transport and Communication; Industry and Commerce, Wildlife and Forestry;
- Government Institutes: ARA-Zambeze; Fisheries (IIP, IDPPE);
- Municipality of Tete and Moatize, Government of the District of Moatize
- EDM, National Administration of Roads (ANE), Mozambique Railways Company (CFM), GPZ
- Universities

Beira

- Provincial Government; Provincial Directorates: Coordination of Environmental Affairs (DPCA); Public Workings and Housing; Tourism (Conservation Areas Department); Agriculture; Mineral Resources (DPREME); Energy; Transport and Communication; Industry and Commerce, Wildlife and Forestry;
- Government Institutes: ARA-Centro; Fisheries (IIP, IDPPE), National Meteorological Institute (INAM);
- Municipality of Beira;
- EDM, National Administration of Roads (ANE), Mozambique Railways Company (CFM), Cornelder, Emodraga, Companhia de Sena, Carr Foundation (Gorongosa National Park);
- Universities

Quelimane

- Provincial Government; Provincial Directorates: Coordination of Environmental Affairs (DPCA); Public Workings and Housing; Tourism (Conservation Areas Department); Agriculture; Mineral Resources (DPREME); Energy; Transport and Communication; Industry and Commerce;
- Government Institutes: ARA-Centro , Fisheries (IIP, IDPPE);
- Municipality of Quelimane.
- Zambézia Province Riverine Districts and Administrative Posts;
- EDM, National Administration of Roads (ANE) Quelimane Delegation and Mozambique Railways Company (CFM)
- Universities.

Maputo

- Ministries and National Directorates: Coordination of Environmental Affairs (MICOA); Planning and Development; Public Workings and Housing (National Directorate for Water); Tourism (National Directorate of Conservation Areas); Agriculture; Mineral Resources (MIREM); Transport and Communication (MTC); Industry and Commerce; Energy / UTIP
- Government Institutes: Fisheries (Maritime Administration, IIP)
- EDM, Mozambique Railways Company (CFM) and National Administration of Roads (ANE), Hidroeléctrica de Mphanda Nkuwa (HMNK), GPZ.
- ONGs: WWF, IUCN; Justiça Ambiental;
- Universities.

For a complete list of identified stakeholders, please see Appendix 1.

B1.4.2 Consultation Meetings

Four consultation meetings were held in Beira (May 17), Quelimane (May 18), Tete (May 19) and Maputo (May 20).

In preparation for the meetings, invitations were sent to major stakeholders via e-mail, fax and posts, followed by phone confirmations. Adverts were also published, according to legal requirements, in nation-wide newspapers (Notícias and Diário de Moçambique). Copies of the draft EIA report were sent to DPCA offices in Beira, Quelimane, Tete and Maputo. The report was also available for consultation at Impacto's website.

The Team included: Kamal Govender (ERM), Victor Hugo Nicolau and Sandra Fernandes (Impacto) representing the Consultants, Alan Menton, Greg Britton Phil Tanner and Ivo Lourenço, in representation of Riversdale.

The overall structure of the meetings comprised a presentation prepared by the Consultants, presenting the main conclusions of the EIA and addressing main concerns expressed by stakeholders during the previous consultation exercises. A plenary discussion and question and answer session among participants related to the issues and concerns raised by the content of the presentations would take place afterwards.

The presentation was provided in non-technical language and in Portuguese. Whenever necessary, the questions and answers would be translated between Portuguese and English to make sure that both stakeholder and Riversdale had a full understanding of the issues under discussion.

B1.4.3 Meetings Summary

Beira

Venue: Hotel VIP, 17/05/11

52 personalized invitations sent.

Key Issues Identified:

- Monitoring: who will do it; and what which monitoring plans will be in place;
- Impact on fisheries due to combined disturbance of traffic and dredging;
- Conclusions extracted from modelling should be validated by observation of coal barging operations existing elsewhere;
- All negative impacts have been rated as being of low significance;
- Cumulative impacts of increased traffic in case other operators are given the go-ahead to use the navigable channel;
- Local populations will not benefit from the project. Support and compensation measures must be studied;
- Concerns related to dust emission since the barges will not be covered;
- Health concerns due to the possible inhalation of coal dust in the vicinity of key project areas;
- Effects of dredging on the quality of water for bathing and drinking;





Quelimane

Venue: Hotel Chuabo, 18/05/11

47 personalized invitations sent.

Key Issues Identified:

- Noise impacts on riverine communities;
- Possible constraints induced by dredging on fishing activity;
- Possible damage on the Sofala Bank due to transloader presence and transloading activity;
- Need for ongoing monitoring to verify possible environmental degradation induced by the Project;
- Increase on margin erosion due to boat wake and possibility of contemplating erosion prevention measures like planting vegetation on margins;
- Decrease of fish and prawn captures due to project impacts on mangroves, vital for maintaining fish and prawn stocks;
- Increase of human-hippo conflict due to disturbance of dredging and barging on hippo populations;
- Possibility of accidents with barges at the river mouth, due to rough seas;
- Signage on river channel to increase navigation safety, mainly near meanders and areas where the channel shifts direction;
- Treatment of residual and waste waters produced in barges and pushboats;



Tete

Venue: Hotel Zambeze, 19/05/11
63 personalized invitations sent.

Key Issues Identified:

- Benefits of the Project understated in the report. Local agriculture and transport possibilities will benefit from the Project;
- Need to consider construction of alternative ports, Macuse and Pebane being possible options;
- Need to find compensation schemes to benefit fishermen who will have to temporarily interrupt their work due to project activities;
- Need to assess if barging and hydropower projects are compatible;
- Social issues insufficiently covered in draft EIA. No quantification of affected people;
- Need to ensure that accidental fuel leaks will be addressed in a prompt and effective manner;
- Need to ensure that the existing dams will not be requested to release additional flows for navigation purposes;
- Need to ensure that dust emissions at Chinde will not affect mangroves and, thus, have a detrimental effect on prawn fishing;
- Need to give priority to upgrading of local labour instead of excessive use of expatriate labour;

- Need to assess if the new Caia bridge needs protection against accidental impacts;
- Need to prepare a comprehensive monitoring plan. Monitoring at Benga, Mutarara and Chinde only is insufficient;
- Need to provide a list identifying sites for deposition of dredged materials;
- Need to contemplate alterations to the Project in case the building of Lupata dam goes ahead;
- Need to contemplate the possibility of a limitation of the navigation period (as opposed to 24h/day navigation) to accommodate other river-centered interests;
- Need for Riversdale sharing information and data with relevant institutions such as ARA Zambeze.



Maputo

Venue: Hotel VIP, 20/05/11

Invited: 64 personalized invitations sent.

Key Issues Identified:

- Need to define size of exclusion zones around main project activity areas (loadout point at Benga, Mutarara, Chinde and oceanic transloader site);

- Need to clarify effect of dredging in the main channel in water dynamics (speed, capacity to transport sediments, capacity for increased erosion, etc.);
- Possibility of putting project on hold until Strategic Assessment for the Zambeze is finalized;
- Need to contemplate possible Project impact on hippo population; it has been observed in other navigated African rivers that hippo populations have decreased;
- Need to clarify potential project impacts on crocodile populations. The report does not address this issue;
- Need to enforce strict regulations; the country is not prepared to manage river navigation at the proposed scale: lack of regulations, lack of trained personnel to monitor compliance with navigation rules, etc. Risk of wasting time and effort in conflict management.
- Need to speed up the transfer of know-how process. Start training Mozambican staff as soon as possible;
- Need to define maximum dredging limits, in order to ensure that river will not be overdredged;



Comments/Recommendations received after meetings

At participant's request, the period for comments after the public meetings was extended by two weeks. Comments period was, therefore, open between May 20 and June 20.

Three comments were received:

- A letter from the Proponent of Lupata Dam, stating possible interference of proposed dam with the Benga loadout facility and barge traffic;
- A comment from a duly identified member of the public stating that the EIA draft report does not refer how the Barging Project and the building of Lupata Dam will be compatible;
- A recommendation to Riversdale to allocate funds to promote, thru NGO's, alternative development plans (not centred in fishing or in agriculture) for populations living up to 5-6 km from the river banks, in order to allow those populations to better cope with impacts on their river-centred livelihoods.

B1.5

THE WAY FORWARD

The ESIA Report has been finalised in light of the comments received during the public consultation process for the ESIA phase. All registered stakeholders will be notified of the submission of the final ESIA Report to MICOA.

Appendix 1 covers the suite of meetings held to date. A Comments and Response table is also included in Appendix 1

Appendix 1

Record of Meetings

Appendix 2

Issues and Responses Table