

Social Safeguards Due Diligence Report

August 2018

PNG: Water Supply Scheme for Tete Settlement

Prepared by the Department of National Planning and Monitoring, Government of Papua New Guinea for the Asian Development Bank.

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Papua New Guinea: Water Supply Scheme for Tete Settlement

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**Social Safeguards
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I. Project Overview

1.1 Project Background

1. The project will improve access to safe water in Tete settlement in Port Moresby, Papua New Guinea (PNG). PNG is the largest and most populated Pacific nation, with a population of at least 8.15 million. The urban population of the capital Port Moresby is estimated at about 800,000, of which more than half live in informal settlements. While the urban growth rate is around 2%, growth rates in informal settlements of between 5% and 8% have been reported. This rapid urbanization has contributed significantly to a growing landless class living in squatter and informal settlements with limited or no access to basic social services. These settlements are now an established feature of the urban landscape in Port Moresby.

2. The impact the project is aligned with is the improved health of the population of Tete.¹ Outputs include: (i) new water supply infrastructure constructed, including a pipeline and a storage tank; (ii) Tete water supply scheme managed by the community via the newly formalized community Water, Sanitation and Hygiene (WASH) committee; and (iii) a management model developed for a community-managed water supply scheme in settlement areas.

1.2 Objectives of the Due Diligence Report

3. In accordance with ADB Safeguard Policy Statement 2009 (SPS),² a social safeguards due diligence was conducted as part of the project preparation, to confirm the scope of land required and if there are potential involuntary resettlement impacts requiring resettlement planning and management. Specifically, this due diligence review aimed to:

- a) identify if the project will have any land acquisition and resettlement impacts;
- b) identify if the project will have any impacts on indigenous peoples and other vulnerable groups;
- c) assess the overall social benefits and impact from the investment; and
- d) recommend mitigation measures to address the negative impacts;

1.3 Methodology

4. Data collection was done primarily through household survey in Tete community and consultations with key stakeholders including Tete leaders, local NGOs and church groups. Focus group discussions among community members and field observations have also been undertaken to triangulate the outcome of the survey and other key information collected.

II. Project Scope and Due Diligence on the Project Site

5. **Project Components.** The project will include (i) detailed design of water supply infrastructure for Tete settlement; (ii) due diligence activities; (iii) civil works associated with the construction of water supply infrastructure, including testing and commissioning; (iv) community mobilization including awareness activities and training of community water, sanitation and

¹ Health is one of the Government's sixteen critical policy and program areas identified in the Critical Activity Matrix, in Government of Papua New Guinea Department of National Planning and Monitoring. 2015. Papua New Guinea Medium Term Development Plan 2 2016-2017. Waigani.

² Asian Development Bank, Safeguard Policy Statement: Policy Paper. June 2009.

hygiene (WASH) committee;³ and (v) regional knowledge sharing associated with the project.⁴ The financial viability of the project and the WASH management model developed will also be assessed, to better enable Eda Ranu to assess the feasibility of future water supply investments in settlement areas.

6. While detailed design will determine more specifically the works involved, the water supply infrastructure will include activities such as construction of trenches and laying of pipelines, construction of water points and construction of water tank/s. The water supply system is likely to include a combination of community standpipes, connections to community facilities (e.g. churches, a school, and police station) and possibly some household connections.

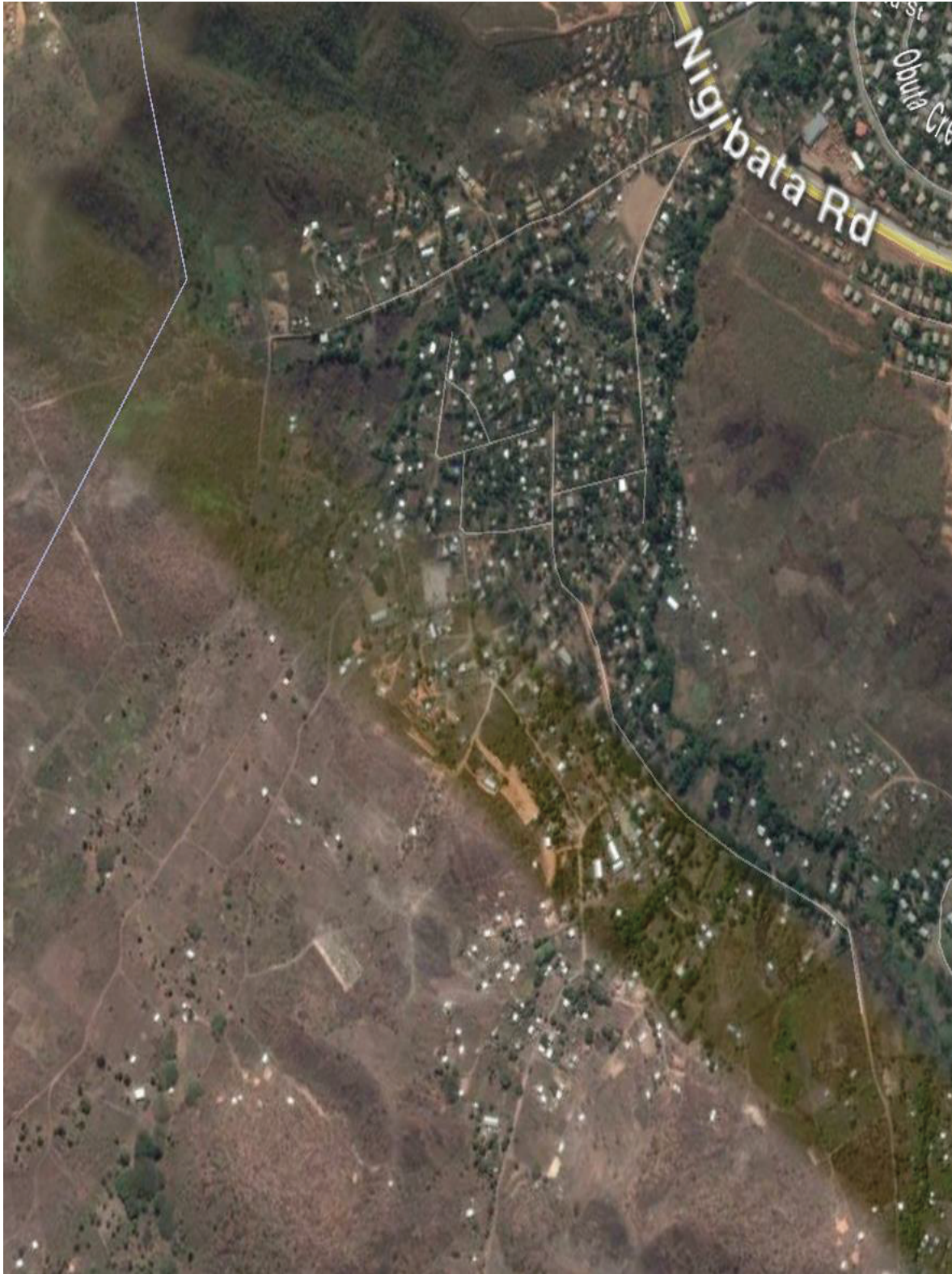
7. **Confirmation of land ownership.** The Tete Settlement is located in northern Port Moresby in the Moresby North West District, close to the area of Gerehu (Figure 1). The area is approximately 2km² within the Allotment/Portion No. 3530 and 3531 of NCD (**Appendix 1**). The settlement is a government-owned land and therefore establishing water infrastructures will not require land acquisition. There are no legacy issues related to landownership. The project design will avoid affecting any private or communal assets in the community. The area has enough space for water pipes and water tanks to be installed free of any obstruction. The project will therefore not result in any involuntary resettlement and there will be no affected assets. The communities are supportive of the project and no risk of disruption during implementation is anticipated.⁵

³ Committee to be trained in WASH advocacy and basic system maintenance. Eda Ranu has indicated that it supports maintenance activities in other similar small supply schemes in settlement areas, but encourages the community to play a role in basic front-line maintenance.

⁴ The Pacific Water and Wastewater Association may be engaged for South-South knowledge sharing activities.

⁵ Community support for the project is evidenced through the results of recent community survey. Minutes to further validate community support are under preparation.

Figure 1: Tete Settlement



8. **Land use arrangement.** Settlements in and around Port Moresby are becoming a focus of Government with both the NCD and the Department of Lands agreeing, and stating publicly, that all Settlements need to be transformed into suburbs.⁶ When plans are developed by the Department of Lands they must then be approved by NCDC. Historically the Department of Lands and NCDC have had different priorities. Based on progress to-date as well as budget constraints, it is reasonable to expect that plans will only materialize in the medium to long-term future. This provides additional justification for the proposed project in Tete, as a means of addressing core services until aspirational plans for formalization of settlements can be met.

9. Consultations with NCDC suggest the existence of draft plans for the Tete area (portion 3531), that include a range of intended land-uses including some government housing and a large number of blocks for current Tete settlers. The proposed water project has been discussed with both the NCDC and the Department of Lands with both organizations acknowledging the pilot in Tete as a positive and important step in providing basic services for Settlements. The use of the Tete land for water infrastructure has been agreed among all the concerned government agencies.⁷

10. **Indigenous Peoples.** There are several tribes and clans in the project area but they are not separate from mainstream society; institutions are not distinct and they are not vulnerable due to their endogeneity. ADB's Indigenous Peoples Policy is therefore not triggered by the project.

III. Socio-Economic Profile of the Project Affected Persons/Beneficiaries

A. Socio-economic situation of Tete Settlement Port Moresby

1. Introduction and Context

11. Project development in Port Moresby settlements is a complex challenge. There is a lack of information regarding the population, the geography, the services, and few or no available maps. In addition, there are many practical, logistical, and security challenges to overcome. Settlement residents are desperate for better services, and given their willingness to pay for water, Eda Ranu has an opportunity to capitalize on additional revenue streams once services to these customers can be improved. There is thus a need to formalize relationships between water utilities and communities, and allow residents to receive and (conveniently) pay for an improved level of water provision.

12. The following summary of the socio-economic profile of Tete is based on data collection through a household survey conducted in Tete in November 2017, as well as consultations with key stakeholders, focus group discussions and field observations.

13. Whilst Tete has existed for many years, and the **ethnicity** of the population has changed as time has gone by, the current population (as sampled) includes 71% from the Western Highlands, 13% from the Eastern Highlands and Central Province, and 5% from the Southern Highlands and Jiwaka Provinces. In total the population sampled included people from 16 Provinces.

⁶ Plans are also outlined in the NCD Citywide Settlement upgrading strategy 2016-2025

⁷ The project has been discussed during the WASH Taskforce (Project Steering Committee) meetings which comprise key sector stakeholders.

14. Information gathered on **education** showed that whilst a higher proportion of men completed both Primary school and College, more women completed secondary school and university. 16% of men and women did not attend any school.

15. While secondary data suggests a **household size** of around 8, survey data suggests a significantly higher figure, with 45% indicating a household of more than 8, and over 20% having more than 12 people sleeping at their house. Of respondents interviewed 9% answered that someone living with a **disability** lived at their house, responses included joint pain, deafness, blindness, car and accident injuries.

16. In terms of **governance arrangements**, Tete residents feel that the leaders from their own block represented them, and also that the Tete Residents Association had a role representing all of Tete. Disputes are typically settled by leaders from the residents' own block.

17. It is apparent that most people in Tete rely on multiple sources of **income**, and on the income of several household members. Approximately 50% of survey respondents were street vendors making and/or selling various goods from vegetables, fruits, cigarettes, bettlenut, livestock, fish, water, clothing, drinks, biscuits, and firewood. These products are sold both within Tete and further afield, with many travelling to the middle of town to sell their goods. There are also several taxi owners/drivers in Tete.⁸ It would appear that 65% of households in Tete are receiving between K400 and K2000 per week, this can vary widely and whilst many households are very poor, many are not.

18. To understand peoples' **willingness to pay** for services, the survey asked questions relating to payment for **electricity**. This is a contentious question and one that people may feel uncomfortable answering; hence some responses may not be entirely accurate. 42% of Tete residents responded that they do not have electricity, implying that 58% do have some form of electricity. This includes legal connections, illegal connections, use of a generator, and solar power. Of the 58% that do have electricity, 62% do not pay for it, while the remainder do pay. Responses indicated that those who pay are paying up to K70/week. Overall, of the 151 respondents, 127 gave an answer, and of that 127, 28 are paying for electricity.

19. In summary, the Survey showed that people living in Tete are not well educated, live in overcrowded houses, and come mostly from the Highlands of PNG, predominantly the Western Highlands. Many fear eviction, which impacts on their ability and willingness to invest in improving their living arrangements. They prefer leaders from the Block where they live but also recognize the role of the Tete Residents Committee. They work hard to earn a living and to look after their children, mostly as street vendors and taxi/bus drivers with some working in government positions, and receive very little support from any other parties, be they government, NGOs or the private sector. Their lack of real engagement with decision-makers means they have little opportunity to raise their concerns and fears for the future, and no voice in advocating for improved government services.

2. Water

20. Tete residents use a variety of different **water sources**, depending on the availability of water and the time it takes to collect. Tete currently has one supply point that is controlled by Eda

⁸ Whilst "taxi driver" wasn't one of the available answers in the recent survey, of the 64 responses in the "Other" category, 30 of them were transport related, taxi driver, taxi owner, PMV owner, PMV driver.

Ranu, this consists of an **open pipe** that provides water for a short period of time each day, on most days. At the south-western end of the settlement there are a series of small springs that provide water for part of the year, in addition there are several (three or four) hand-dug wells that are owned by residents.

21. 70% of people in Tete use the open pipe as their **primary source** of water with about 60% considering it to be their main source of water. The second most popular source of water is “water collected from town”. If these two options are combined, then 80% of Tete residents are relying on water provided by Eda Ranu, either through the open pipe in Tete, or by collecting it somewhere in town, normally the Gerehu Market or the houses of relatives. 80% of respondents are paying for water and most people (35%) are paying more than K30 per week for the water they use.

22. Most people must walk more than fifteen minutes to reach their **water collection** point and take more than 2 hours to collect water. Most people (41%) collect water once per day, with 30% collecting water less than once per day. People collecting water less than once per day are generally using a vehicle to collect large amounts of water from town, with some having water delivered to a large tank at their house.

23. Water is collected by a range of different people including men and women, and young and old, but mostly by women and young women. Generally, when water is collected from town, in a vehicle, this is done by men, when water is collected from the open pipe, this is mostly by women and young women.

24. 49% of respondents do not pay a **monthly water bill**, 29% pay the Water Committee, and 9% pay Eda Ranu. The amount paid varies greatly. For the amount paid to a Water Committee member, the variety of responses suggests different response incentives. People may feel that they should be paying for water, and so inflate the regularity of that payment, they may answer using the amount that they are paying for water, regardless of whether it is a monthly bill payment, or just what they pay others for water. Regardless, it is apparent that many people are paying significant amounts for water each week. From looking at the accounts, it is clear the residents are not paying Eda Ranu.

25. In terms of how residents know how much to pay, 63% said they were informed by the Water Committee member, and that when they did pay, they would pay it to the Water Committee member, who would often come to the house to collect it. It is likely that this is how the process initially was intended to work when the system was first established. Over time though, the level of service has declined, water bills have seldom been paid, and the Water Committee has been disbanded.

26. A (if not “the”) critical component of any payment for services system, is what happens **if you do not pay**. 21% of respondents said that nothing happens if they don’t pay, 35% claimed that if they did not pay then they cannot get water from the open pipe, and 28% answered “Other”. Of the “Other” responses most claimed that the supply is turned off by Eda Ranu if they do not pay.

27. The current situation in PNG settlements has been further complicated by the way that the **Community Services Obligation** (CSO) has been interpreted and implemented. The CSO states that SOEs like Eda Ranu are obliged to provide services, in this case water services, to those who need it but may not be able to afford it. The cost of such provision of services should then be recouped from Government. Whilst Eda Ranu are aware of the CSO, and in some instances do

provide services to communities, normally when they are requested to do so by a Member of Parliament, they have never claimed the cost of such services from Government. This means that they provide a very low level of service, to fulfil an obligation, but do not get paid for it. This low level of service (analogous to that in Tete) means that residents are unlikely to pay, given that they only get water for one or two hours a day, sometimes less. This has created a downward spiral with Eda Ranu and Settlement residents stuck in the middle, residents getting very poor service and not paying for it, and Eda Ranu not recovering the cost of provision, and certainly not being able to generate a surplus.

28. The household survey also assessed what service levels people would be happy with and would pay for, asking *"If Eda Ranu were able to install a standpipe closer to your home, say within 100 meters, that would operate 24 hours a day and provide clean (safe) water, would you be prepared to pay a flat rate for this service?"* 44.59% responded "Yes" and would be prepared to pay more than K5 per month. Of the 37.84% (56 respondents) who answered "Other" the majority of comments were positive and said they would be prepared to pay more. Two of the comments said that they would only pay if the Standpipe was close to their own home. Only 5.41% responded "No".

29. The next question offered the same service level but included paying for the **amount of water you use**, rather than a flat rate. A much higher percentage (24.48%) answered "No". 39.16% answered "Yes" and would pay more than K10 per month. Of the "Other" answers there was some concern regarding whether everyone would pay, *"I might pay, but then others will not"* but still general agreement that they would pay whatever the cost.

30. The third question in this series offered an improved level of service, and the prospect of **sharing a connection** with 3 to 5 houses and again paying for the water that you use. 11.64% answered "No" with 36.99% answering "Yes". Comments in "Other" responses show that most people would be happy with this service level, but they would also have concerns about whether their neighbor would pay their share.

31. Finally, respondents were asked how much they would be prepared to pay for a connection to their **own yard/house**. 36.24% answered that they would be prepared to pay up to K40 per month. Of the 61 "Other" responses 58 said that they would be prepared to pay more than K40, and three said it would depend on the amount charged.

32. When asked if they would be prepared to pay a **connection fee**, 32.65% answered "Yes K200". Of the 31.97% of "Other" responses, the majority also answered in the positive but were unsure what the amount would be. 22 of the 47 "Other" responses said that they would pay any amount.

33. When asked about weekly or monthly billing 96% said they **preferred monthly billing**. When asked about flat rate versus pay for what you use 62.84% preferred a **flat rate** with 37.16% preferring to pay for the amount used. When asked who they would prefer to pay 89.26% preferred **paying directly to Eda Ranu** with 7.38% preferring to pay the Water Committee. Of the comments received there was a clear message that they did not trust the Block Leaders or Water Committee members to handle their funds, and that it would be safer and more transparent to pay directly to Eda Ranu.

34. It is clear from the response to this series of questions that people see water as a vital service and are prepared to pay for it. They are already paying for water and having to collect it in town or wait in very long lines. They would pay more as the service level increases but have

trust issues if their payment is linked to someone else's and are concerned about getting what they are paying for.

3. Health and Hygiene

35. Health and hygiene in Tete is a constant challenge. The lack of water and effective toilets, coupled with poor knowledge of good health and hygiene practices means that many people suffer regular bouts of sickness. When asked if they had their own toilet, 96% answered that they do. Whilst **96% of people have a toilet**, of the toilets inspected most were not operating as an effective barrier to the transmission of disease, many were full, and most were poorly constructed. Approximately half of the 151 toilets observed had a well-fitting slab, well-fitted was defined as not having holes through which flies could travel, apart from the main hole over which people squat. Whilst 77% of the toilets were considered useable, 69% were observed to have flies moving in and out of the toilet. Only 37% were considered to have a permanent superstructure with just 16% able to be locked from the inside, and 18% able to be locked from the outside. 20% of the toilets observed had some form of riser on which to sit, 11% had clear evidence of feces on the floor, and 11% were full. Very few, if any, were functioning as a barrier to the transmission of disease. When the yard area was observed 8% had evidence of defecation in the open, often this was likely babies' feces. More than 50% of respondents answered that the toilet that they use does not have a light, with 45% saying that they use a torch, including using a cell phone as a torch, when they use the toilet at night.

36. Whilst 96% of respondents answered that they did have a toilet, 98% answered that they would like to have a better toilet. Reasons for not already having a better toilet included "not having enough water" and that "it would be too expensive". Of the 24 comments received in the "Other" category 10 said that they need to have a sewerage system before they can improve their toilets. Predictably, when asked "what would help you to have better toilets" the strongest response, 82% was "**having access to water**". Other responses included "having more money", "health education", and "demonstration toilets".

37. Approximately 20% of respondents said that they were sharing their toilet with people who did not reside in their house, so sharing with neighbors and others. Whilst 20% are currently sharing their toilet with people outside their own household, 80% answered that they would not use a **public toilet** if one was installed. Of the 80% who said they would not use a public toilet the main reasons given included that it "would be dirty" that they "don't like sharing with strangers" and that "it would not be safe".

38. Respondents were asked if there were any taboo's regarding **men and women using the same toilet**, 93% said there were not. Of those that said there were, answers included "people with illness should use a different toilet", "men should use separate toilet to women", "we don't allow women to cook food when they have their period because it is part of our culture", "because of females monthly periods", "exposure to different diseases" and "it is risky for women to use the same toilet as men".

39. The Survey showed that 70% of the population of Tete have had diarrhea during the last 12 months and that it is usually children between 0 and 15 who get it the most, although adults also suffer. Respondents were asked "where do children normally defecate?" to which 45% responded that children defecate in their toilet, implying 55% do not. The next question asked how adults **dispose of babies / children's feces** and showed that approximately 50% throw it into the toilet, the rest do not. This means that about one quarter of all children's feces is not being

put into a toilet but is being buried in the yard, thrown into the bushes /drain, thrown onto the rubbish heap, put on the fire, or left for the dogs to eat.

40. Having explored peoples understanding of good health and hygiene behavior and established how little support Tete has received in the past, residents were asked “when do you wash your hands?”. Strong responses were recorded for “**hand washing** after going to the toilet” and “before eating”. 47 comments were recorded in the “Other” category, these included 16 responses that said they only wash their hands when they have water, other comments included that they never wash their hands. 60% of respondents said that they use soap, and 34% said they sometimes use soap. Of the respondents who answered that they did not use soap 64% said it was not available, and many commented that they did not use soap because there was not enough water to wash their hands.

41. To cross check answers given concerning hand washing one of the observation questions was “is there evidence of a hand washing facility close to the toilet?”. 81% of observations were that there was no obvious evidence of a functioning hand washing facility and only 10% of households had any soap visible close to the toilet or wash basin.

4. Menstrual Hygiene Management

42. Effective menstrual hygiene is vital to the health, well-being, dignity, empowerment, mobility and productivity of women and girls, and is inextricably linked to water and sanitation service provision. Community members were asked whether they were willing to answer questions on Menstrual Hygiene Management (MHM) Whilst 84% of women answered “Yes” only 55% of men answered “Yes”. On several occasions, when interviewing a man, with his wife sitting close by, the men suggested that his wife respond to the MHM questions.

43. There were a range of responses given to the question “Where do you go to clean yourself when you have your period”. Most woman responded that they use either the toilet or an outside wash area. Other responses included “work, “bush/creek”, “Gerehu Market Public Shower”, and “in the yard”. Observations showed that only 16% of toilets could be locked from the inside.

44. Most respondents (95%) said that they use “sanitary pads”. 12% said that when they could not afford sanitary pads they would use “cloths”. Sanitary pads would be disposed of in the toilet or burnt with 23 of the 24 comments under “Other” saying they would be burnt. If cloths are used then they are seldom washed and re-used, most respondents would dispose of them by throwing them into the toilet or burning them, although two comments said that they “go to my relatives’ house in town to wash them”, and “shower area and wash the cloth”.

45. Men who were willing to answer questions on MHM were asked the same questions as the women. Interestingly whilst 96% of women said that they used sanitary pads and only 3% used tampons, male responses showed that they believed 67% used sanitary pads and 22% used tampons. Of the 8 responses in the “Other” category 7 responded that they do not know what women used and that it was women’s business. When asked how pads were disposed of 55% of men said they were put in the toilet and 26% said they did not know. When asked about the disposal of cloths, 43% of male respondents said they did not know where women/girls disposed of them.

46. The MHM component of the Survey shows that there are some difficulties in accessing clean absorbent materials, possibly due to availability, cost, or control of household finances. A significant number of women said that they use cloths and that these are seldom washed. This

could be due to a lack of both water and soap. Privacy is certainly a challenge given the condition of washing areas and toilets and the fact that few toilets and even less washing areas can be locked from the inside. The Survey shows that many men do not want to discuss MHM and see it as women's business rather than a normal and regular occurrence. The pidgin phrase for a woman having her period is "Sik Mun", literal translation being "sick moon", this indicates traditional/cultural attitudes and implies that a woman is sick when having her period.

5. Gender Analysis

47. Of the 152 interviews that were conducted 45% (68) were with women. Generally, the female respondents were younger than the male with most female respondents (38%) being in the 25 to 34 age group, and most male respondents (40%) being in the 35 to 44 age group. Approximately 20% of female respondents were less than 24 years of age compared with only 4% of male respondents.

48. The Survey aimed to interview heads of households wherever possible, if the head of household was not present, or did not want to be interviewed, then another adult member was chosen. Of men interviewed 98% were part of a household that was headed by a man, with 26% of women interviewed being part of a household headed by a woman.

49. The survey found that women are less likely to be living in temporary houses with 73% living in permanent wood/iron houses compared to 62% of men, and approximately 36% living in temporary accommodation compared to 46% of men.

50. Women are more fearful of being evicted from Tete with 70% fearing eviction compared with 56% of men. As with men, women are less concerned about eviction from Landowners and more concerned about eviction by Government.

51. Of the respondents who said they did not own their land (23 respondents), women are more likely than men to be paying rent, or more likely to be living in a household that pays rent, with 66% of women paying rent to a Landowner compared with 36% of men.

52. In terms of representation and leadership men and women gave similar responses. The key difference being that women feel more represented by leaders from their own block, and men by the Tete Residents Association. When asked "Is there a group that represents all of Tete (as opposed to just you) women responded that leaders from their block and the Tete Residents Association scored the same, whereas for men the Tete Residents Association scored more highly.

53. Women are less likely to have responded that they are "self-employed", they work less for private companies and work as much for government as do men. Women earn less than men with 44% earning less than K200 per week compared with 28% of men, and 56% of women earning more than K200 per week compared with 72% of men. Women are less likely to live in a house that has a legal power connection.

54. Women, and often young women are more likely to be responsible for collecting water from the open pipe, men more likely to collect water when it involves the use of a vehicle. This contributes to women spending more time collecting water with 76% of women spending more than one hour each time they collect water, compared to 50% of men. Women spend less money on water, since they mostly collect it from the open pipe, with men collecting water from town normally using a vehicle.

55. Women are more likely to have some form of light in their toilet; this includes access to a torch so that they can use the toilet at night. Women were asked if they have ever been assaulted when visiting the toilet or collecting water. 10% had been assaulted when using the toilet and 33% when collecting water. Comments given in relation to assaults when using the toilet included fear of the native Goilala people, fear of snakes, and fear of young boys. Comments regarding assault when collecting water included being abused by drunk men, being accused of pushing in the line, arguing with people who live close to the open pipe because they feel like they own the water, and being assaulted by other women when arguing about pushing in the line.

IV. Information Disclosure, Information and Participation

A. Project Stakeholders

56. There are a range of key stakeholders for the proposed project including Tete community, SOEs (Eda Ranu), NGOs and Government. Primary government stakeholders include the Department of National Planning and Monitoring (DNPM) through the WASH PMU, the National Capital District Commission (NCDC), the Department of Urbanisation, and the Department of Lands.

57. The role of the DNPM/WASH PMU is to oversee the project and to act as the Executing Agency. To-date, this has included the development and implementation of a WASH Household Survey, and the fostering of close linkages with Tete residents. DNPM will play an important role in monitoring the project and ensuring that key lessons are documented and shared. They will oversee the development of the project and the trialling of a management model that can later be adapted, replicated and scaled-up. There are approximately 112 settlements in and around Port Moresby that are currently in need of improved services. DNPM will ensure lessons are shared, and will lead advocacy efforts for future funding from both Government and donors/funders.

58. The Department of Lands and the Department of Urbanisation will assist the development of the project in terms of understanding the current nature and status of land ownership in Tete.

59. The NCDC are responsible for all planning and land developments in the national capital district of Port Moresby. They will support the project by sharing development plans and contributing to the design of project interventions.

60. Water in Port Moresby is managed by Eda Ranu, an SOE. Eda Ranu currently provides water to Port Moresby, including to several settlement areas. Many of the settlements receive very poor service levels, and do not pay for water. The Tete pilot is being designed working closely with Eda Ranu. The management model developed will be adapted and used for other settlements to improve relationships, accountability, and cost recovery for water services.

61. Key stakeholders and immediate beneficiaries include the residents at Tete settlement. There are currently approximately 8000 people living at Tete, who are served by a single open pipe water supply.

B. Consultation and Participation Activities

62. The development of the Tete project has been continuing for more than one year. Project preparation has involved extensive consultation with Government, Eda Ranu, local NGO's and

church groups, and Tete community. A summary of key issues, concerns and questions raised by the community during consultations, and how these have been responded to, is provided in Table 1.

63. Meetings have been held with the Chairman of the Tete Residents Association and other members of the Association. A WASH Household Survey was conducted in Tete. This survey interviewed 152 residents and explored a wide range of topics including health status, education, existing water and sanitation facilities and services and examined their commitment to the project and receiving improved water services. During the Survey the WASH PMU and WASH Specialist spent four days in Tete talking with residents and explaining the proposed project. The actual survey was conducted on the 1 to 3 November 2017. The survey interviewed 152 people, including 68 women and 84 men. All members of Tete settlement were very supportive of the proposed project and see water as a key to improving their standard of living. They gave up large amounts of their time to support the Survey, this included accompanying all survey teams to ensure security and that people did not get lost.

64. Meetings and discussions have been held with representatives from DNPM, the WASH PMU, the National Capital District Commission, Office of Urbanisation, the European Union, the World Bank, ADB (PNG Office), World Vision, Eda Ranu, Indigenous to Indigenous, Christian Health Services and Four Corners Church. In addition, presentations were made to WASH stakeholders at several national workshops.

65. Information gathered by the Household Survey has been used to shape the project and to develop both service level recommendations and management arrangements. The Survey explored governance within the Settlement and developed a clear understanding of “who represents who”. The Settlement comprises people from 16 Provinces making it a complex governance situation with associated trust and accountability issues. It was clear during consultations that people prefer to have a direct relationship with the provider of water (Eda Ranu) rather than paying their money to other members of the community for on-paying to Eda Ranu.

Table 1. Key Stakeholder Meetings, April 2017 – March 2018

Date	Name	Intended Topics for Discussion	Feedback / Comments from Consultation	Status / Response
October 2016	Mrs Lisa Bani, Magistrate of Gerehu Village; Block Leader John Liki; and others	For DNPM WASH PMU and ADB to gain insight from Tete community on the challenges faced related to WASH service provision	<ul style="list-style-type: none"> Community indicated strong desire for improved services 	In consultation with DNPM WASH PMU, ADB refined the scope of the proposed TA9298 to focus on support to peri-urban WASH, including direct advisory support to the WASH PMU. ADB also commenced preparation of a pilot water supply project in Tete settlement at the Government’s request.
12 June 2017	Chairman of Residents Committee	Design and approach to proposed survey	<ul style="list-style-type: none"> Residents committee was informed that the project was planning a WaSH Survey to facilitate the involvement of 	Survey was designed in-line with the Resident’s committee’s suggestions and three pre-tests of all

Date	Name	Intended Topics for Discussion	Feedback / Comments from Consultation	Status / Response
	David Willie Kund and Committee members		residents in the design of the pilot. The Survey would explore all WaSH issues as well as a range of other areas including governance, land tenure, and security in the settlement	survey instruments were conducted with Tete residents.
1-3 Nov 2017	152 households in Tete	Comprehensive Household Survey	<p>As summarized in other sections of this report. Main conclusions:</p> <ul style="list-style-type: none"> • Community has a strong desire for improved services • Community is willing to pay for water • Residents prefer monthly payment • Residents prefer fixed (over variable) payment • Residents prefer to pay Eda Ranu directly 	Survey results have been shared with key stakeholders, including Eda Ranu, and will be shared with the community in April 2018. Community's concerns have been factored into the project design.
22 March 2018	Rank Kumin, Tete resident and staff at DNPM	To discuss how to refine population figures	<ul style="list-style-type: none"> • Discussed communication plan for sharing information with Tete residents (likely in April 2018). • Discussed the household survey that Tete Residents had just conducted to show more accurate population figures for each Block. 	Mr. Kumin submitted a survey of households that was taken during March. Tete Association members visited each household in all of Tete and recorded the names of all people present at that time.

V. Anticipated Social Impacts and Risks

66. People in Tete lead a challenging life. Water is scarce and sanitation facilities poorly constructed and seldom effective. The Survey shows that there is a high incidence of water and sanitation related illness, affecting mostly children but also adults.

67. Residents currently must travel some distance to collect water, often taking more than two hours for each trip. Often, they have to collect water from the town water supply at places like the Gerehu Market, this is costly and means that Tete residents often pay more than formal Port Moresby residents for their water.

68. Sanitation status is very poor with most people using basic pit latrines. There are a range of sanitation and hygiene behaviors that contribute to poor health, these include a lack of hand washing, often due to a lack of water, but also at times due to a lack of understanding of the potential benefits of hand washing at various times throughout the day. The management of infant feces is poor with at 25% of infant feces not being put into a toilet. This means that feces are left in the yard or disposed of unsafely, contributing to elevated levels of diarrhea. Women and girls also face specific challenges including a lack of access to private, clean and safe water and sanitation facilities to manage their menses, and difficulty obtaining menstrual hygiene management materials.

69. The existing lack of adequate water points means that many people, often women and girls, spend a long time collecting water, this impacts on their availability for other activities including school and income earning activities. An additional challenge with having to queue for long periods of time whilst waiting for water flow is that of assault. When people have to wait a long time for water, and generally leave their water container in the line to hold their place, they may not be there when the water does flow, and so can lose their place in the line. This often causes arguments sometimes leading to physical assault.

70. There is no doubt that the impacts of the project will be overwhelmingly positive. Water availability will contribute to better health and hygiene behavior, will free peoples time to do other things, and will minimize the likelihood of assault.

71. Possible adverse impacts during the construction of infrastructure could include:

- a) dust pollution – dust emission during construction of trenches for water pipes;
- b) traffic congestion during construction – increased traffic congestion due to limited road access and movement of trucks and other equipment;
- c) construction site safety issues – if the construction of a large water tank is considered necessary then there is the potential for safety issues during the construction period. Tete has a large population including many small children who will have to be kept out of any construction areas;
- d) limited road access – certain segments of the road will be temporarily inaccessible during actual construction; however alternate routes exist so access is not affected.

72. An initial assessment of social impacts and risk per design option was prepared during the preliminary stages of the study. The assessment of social, environmental, and technical issues and concerns provided inputs to the selection of the preferred design option. Table 2 below summarizes the assessment of social impacts, risks, and issues per design option.

Table 2: Initial Assessment of Social Impacts and Risks

Item	Potential Social Issues/Impacts	Mitigating measures
Construction of trenches and laying of pipelines	<ul style="list-style-type: none"> • Possible risk of erosion resulting from trenching activities • Possibility of residents falling into trench and becoming injured, adults or children • Debate/argument over best route to lay pipes • Risk of interruption to street vendor activities (minimal) 	<p>Measures to mitigate these potential impacts during the construction are part of the Environmental Management Plan (EMP). Interruption to street vendor can be easily avoided through temporarily shifting stalls prior to construction and reinstalling it back ensuring minimum disruption in the process. If significant disruption can't be avoided, compensation based on the ADB SPS requirement will be implemented.</p>
Construction of water points	<ul style="list-style-type: none"> • Possible risk of erosion resulting from excavation activities • Possibility of residents falling into excavations and becoming injured, adults or children • Debate/argument over location of water points 	
Construction of water tank/s	<ul style="list-style-type: none"> • Possible risk of erosion resulting from excavation activities • Possibility of residents falling into excavations and becoming injured, adults or children • Debate/argument over location of tank/s 	

VI. Grievance Redress Mechanism

73. A grievance redress mechanism (GRM) will still be established to address any other potential social and environmental issues during project preparation, construction and operations of the water facilities. The project is not envisaged to have any grievances related to involuntary resettlement and land acquisition. The GRM for the project will make use of the community leadership as a long-standing mechanism which deals with conflict resolution and affairs within the community.

74. The key functions of the GRM are to (a) record, screen, and investigate grievances; (b) resolve the grievances in consultation with the affected persons/parties and other stakeholders; (c) inform the affected persons/parties about the resolution of the grievances; and (d) forward any unresolved cases to higher authorities for resolution following judicial procedures. The Project Manager of the Project Management Unit (PMU) within Eda Ranu, and the WASH PMU Coordinator within the Department of National Planning and Monitoring will be the focal contacts to receive, record, review, and address project-related concerns in coordination with other government authorities. The contractor will assign a focal person who will work with the PMU and Eda Ranu in addressing complaints that are construction related. The resolution of all grievances will involve community/block leaders to serve as liaison party with the affected persons.

75. The proposed grievance redress procedures and estimated duration is presented below.

Grievance Redress Process

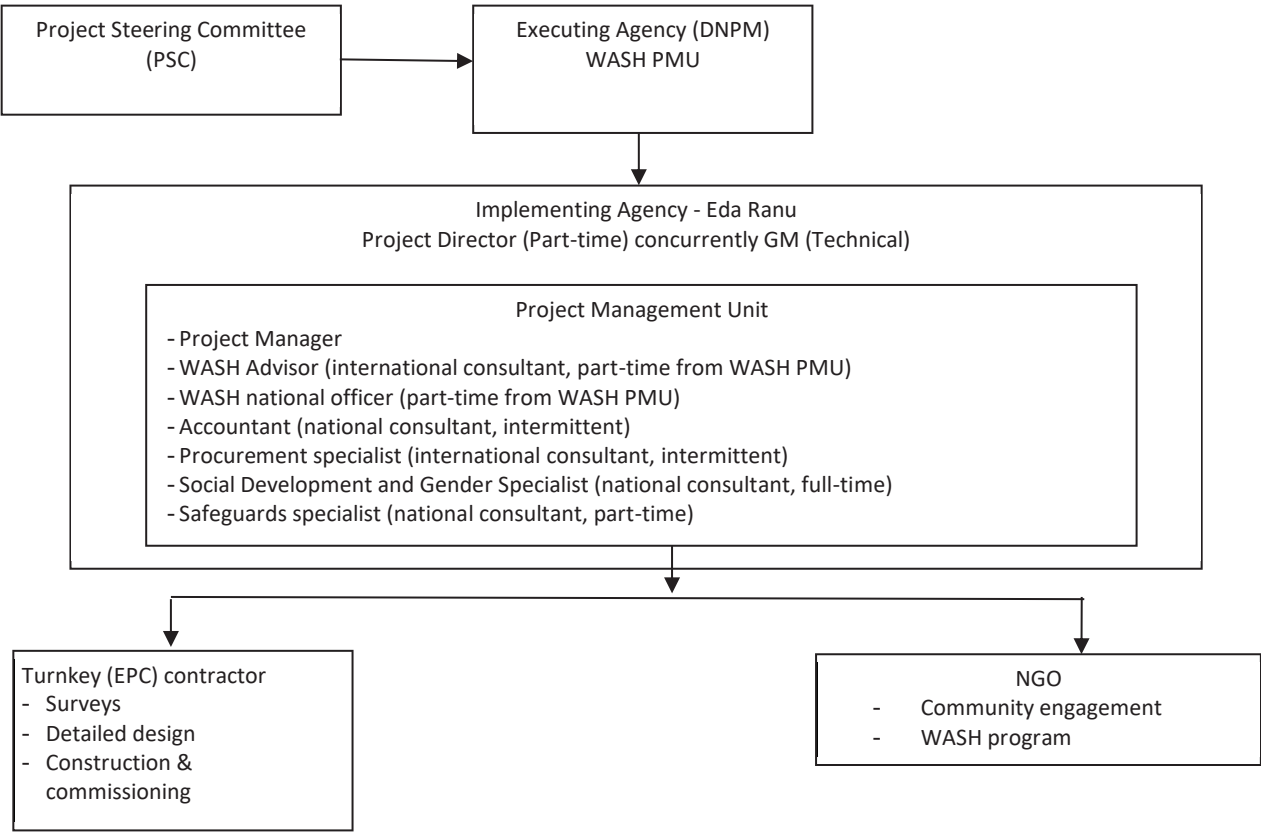
Step	Grievance Redress Process	Duration
1	Affected Person (AP) lodges complaint to the Project Management Unit/Eda Ranu focal points or to Construction Contractor; Construction Contractor	Any time
2	Project Management Unit/Eda Ranu reviews and checks if complaint is within the scope of the project. If within the project, and concerned parties are available to discuss, GRM focal points call for a meeting and immediately discuss and resolve the issue/s.	5 days
3	If complaint is minor, contractor/PMU and Eda Ranu resolve immediately	2 days
4	If complaint is major, contractor/ PMU and Eda Ranu provide immediate interim measures while identifying resolution within 5 days of discussion.	5 days
5	If AP is satisfied with action or resolution, PMU and Eda Ranu gets APs written confirmation of satisfaction; PMU and Eda Ranu log into the record.	1 day
	If unresolved or not satisfied with the outcome at PMU level:	
6	AP forwards case to appropriate court for resolution (District Magistrate or National Magistrate Office)	As per judicial system

VII. Institutional Arrangements

76. The PMU within Eda Ranu will be responsible for monitoring the project progress and any unanticipated social safeguards impacts during project implementation. The PMU, through the Safeguards Specialist, will monitor the implementation progress of environment and social

safeguards and provide semi-annual monitoring for approval by Edu Ranu and submission to Department of National Planning and Management and ADB. The PMU will also submit, along with the periodic progress reports, any documentation of grievances or complaints recorded and corrective actions implemented using the established GRM system in compliance with ADB SPS and pertinent government laws. In the event that there will be unanticipated impacts involving physical and economic displacements, a resettlement plan will be prepared in accordance with ADB and government safeguards requirements. Accordingly, no civil works will commence prior to payment of due compensation where required. The contractor will engage a Safeguards staff to ensure that environment and social safeguards are complied with during civil works. The Safeguards staff will also ensure to avoid any impacts to any assets during construction. The project's overall implementation and reporting arrangements are in the figure below.

Project Implementation and Reporting Arrangements



Appendix 1: Map of Tete Settlement

