

Community Benefit Sharing in the Tina River Hydropower Project

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Introduction

Benefit-sharing is defined in the literature as ‘a framework for governments and project proponents to maximize and distribute benefits across stakeholders, through relevant spatial and temporal scales by use of various mechanisms, and consistent with the principles of sustainability’. This definition recognizes the asymmetric nature of the impacts of infrastructure projects on different stakeholders, and identifies in benefit-sharing the most appropriate mechanism to correct for it.

In 2000, the International Energy Agency and the World Commission on Dams recommended the sharing of benefits with local communities as they are the most directly affected by hydropower projects. Shortly thereafter, the World Bank started exploring ways of incorporating community benefit-sharing (CBS) into dam projects in addition to standard mitigation and compensation measures. Although benefit-sharing is not yet compulsory in the Bank’s safeguards, there are several cases where CBS has been implemented with the Bank’s support.

This paper presents the case of the Tina River Hydropower Development Project (TRHDP) in the Solomon Islands where the World Bank is supporting the development of a community benefit-sharing scheme as part of a Build, Own, Operate, Transfer (BOOT) public-private hydropower operation, which is in advanced negotiations. The TRHDP is a 15 MW hydropower scheme on the island of Guadalcanal, Solomon Islands, 30 km south of the capital Honiara. The hydropower infrastructure will be constructed, operated and owned by an independent power producer and will sell electricity to Solomon Power (SP), the national utility. The TRHDP will supply power to the Honiara grid, reducing the currently high (99%) dependency on diesel, and contributing to reducing the retail price of electricity for consumers.

In the Solomon Islands, about 80% of land is under customary tenure, tightly bound to the social dynamics of culturally defined groups, which constitute and govern themselves in an autochthonous manner, with a wide range of interest groups and actors intersecting with both decision-making and decision-implementing processes. The local communities’ expectations on the project benefits are very high; and past experiences of projects that were not perceived to deliver benefits to landowner groups or their cultural communities formed a key basis for the dramatic civil conflict, which led to dramatic state failure in the late 1990s and early 2000s. These perceptions are a key source of grievance, particularly for groups in Guadalcanal; and increase the difficulty for external actors, including the Solomon Island Government (SIG), to obtain licences and permits necessary for the execution of infrastructure projects¹. For these reasons, benefit-sharing has a further national significance in terms of macro stability in Solomon Islands.

In the context of the Tina River area, land and people are inseparable both conceptually and in practical terms when seeking project related support. This is why, from the early phases of project design, the SIG knew that a ‘social licence’ needed to be obtained and maintained in this complex indigenous terrain. To support the SIG, the World Bank - which is one of the financiers for construction and operation of the hydropower facility - is also supporting a ‘Community Benefit-sharing Pilot (CBSP)’ project with the objective of establishing the institutional arrangements and capacity for ‘benefit sharing communities’ to manage a share of the revenues from a large-scale infrastructure investment project and improve their basic services and economic opportunities.’

¹ PHGC Ltd (2011). *Project Entry and Sustainment Framework*.

This paper is structured as follows: Part I will provide a description of the framework for understanding CBS along with some examples of its implementation worldwide; Part II describes the different phases of the design of CBS for the TRHDP; finally, some lessons will be drawn and presented in Part III.

1. Community Benefit Sharing

1.1 Benefit-sharing in hydropower projects

Hydropower projects generate a wide array of economic costs and benefits that accrue to different stakeholders in different ways. Typically, project developers get a return on investment and in some cases an economic rent generated by the project²; Governments increase energy supply and/or reduce energy costs to support their economies through renewable (cleaner) sources; and final consumers are able to access cheaper electricity to sustain their businesses and livelihoods. Unlike other stakeholders, local communities in proximity to the project area bear the socio-economic costs associated with the project: they may experience changes in the surrounding environment, physical displacement, loss of land, forest and fishing grounds, change in livelihoods and food security, and in some cases disruption of traditional practices and activities. The risk of impoverishment of the communities affected by hydro development can be high, if not properly managed. These communities exercise formal and informal rights over the land they own and/or occupy and the resources they have access to, and are generally reluctant to give up these rights unless they clearly benefit from doing so.

The existing compensation and mitigation measures, which are compulsory in the international investment frameworks such as the World Bank Safeguard Policies, the IFC Performance Standards, and the Equator principles, were created primarily to minimize the adverse socio-economic impacts of investment projects. However, the international evidence (not just on hydro but more broadly on natural-resource extractive projects) shows that in several instances these measures alone have been insufficient to prevent the risk of impoverishment of the local communities hosting the project³, with many projects worldwide continuing to encounter strong local opposition. In the light of this, the concept of ‘benefit-sharing’ started emerging as an enhancement or evolution of such measures.

The concept of ‘community benefit-sharing’ (CBS) first appeared in the mining industry in the 1930s. Their application in hydropower development is more recent. In 2000, the International Energy Agency (IEA, 2000) recognized that ‘local communities are key players in hydropower projects because they are most directly affected by a project’, and recommended that they ‘benefit from a project, both in the short term and in the long term’ not only through monetary benefits but also through ‘improved access, improved infrastructure, support for health and education programs, legal title to land are all important benefits that may be derived from a hydropower project’ (IEA, 2000).

Similarly, the World Commission on Dams (WCD, 2000) proposed a new policy framework for hydropower development, which included the recognition of entitlements and sharing of benefits with the adversely affected communities. The framework recommends adversely affected people be recognised as first among the beneficiaries of the project, and that mutually agreed and legally protected benefit-sharing mechanisms be negotiated to ensure implementation.

In the early 2000s, the World Bank started exploring ways of incorporating ‘benefit-sharing’ into hydropower project design. The need for benefit-sharing stemmed from a recognition of lessons learned from hydropower operations, the roles of social and cultural factors in the effectiveness of outcomes, the added value of multi-sectoral integrated approaches, and the rights of local communities to benefit from development projects (WB Technical Workshop, 2009). Although benefit-sharing is not yet compulsory in the Bank’s safeguards, there are several cases of projects where CBS has been implemented with the Bank’s support.

1.2 What is benefit-sharing? Definition, rationale, and key lessons

² The term *economic rent* refers to the surplus return or profit that some factors of production generate when they vary in quality and are limited in supply. It arises when exploiting a natural resource whose value is independent of any labour, capital or entrepreneurial effort applied to the resource (Rothman, 2000). Rent is a unique form of return in that it will not be dissipated by free market competition and will continue to accrue to whoever holds the right to exploit hydro resources (super-normal profits).

³ See Cernea (2008).

There is no single definition in the literature of ‘benefit-sharing’. However, one that well captures its key features is the one proposed by SWECO (2011), which describes it as ‘a framework for governments and project proponents to maximize and distribute benefits across stakeholders, through relevant spatial and temporal scales by use of various mechanisms, and consistent with the principles of sustainability’. This definition implicitly recognizes the asymmetric nature of hydropower development impacts, and identifies in CBS the most appropriate mechanisms to correct for it.

‘Benefit-sharing’ should be seen as an *approach* to promoting sustainable development in the context of infrastructure projects that moves beyond mitigation and rehabilitation. It does so by recognising the role of multiple stakeholders in the success of the project, and acknowledging the entitlement of the affected people to reap the development opportunities generated by the project itself. The beneficiaries of CBS are typically spread over the project influence area (i.e. they are not limited to the directly affected population), and include those who sacrifice their access to natural resources, give up non-priced environmental services, and are impacted by cumulative and indirect effects. Unlike mitigation measures, which are funded through project investment budget, CBS is typically financed by project operating income.

The objective of CBS is essentially twofold, stemming from different (yet linked) rationales: i) to contribute to a fair redistribution of the benefits generated by the project in favour of those most adversely affected (justified on *equity* and *economic*⁴ grounds), and ii) to take the opportunity presented by hydropower to advance the development of less privileged members of society (justified on *development* grounds). From the project owners’ perspective (developers and Governments), CBS should also be seen as part of a sensitive risk management strategy to build a “social license to operate”: a well-designed CBS scheme should help to align the incentives of the affected communities to those of the project’s owners and operators, building consensus and trust, and favoring a smooth project execution.

CBS should include a strong communication and engagement element, and signal commitment by establishing a formal and systematic approach to local development. Thanks to well-designed CBS mechanisms, projects become socially feasible as well as satisfying the more conventional tests of technical, economic, financial, and environmental feasibility. On the contrary, failing to engage with local communities can lead to opposition and conflict, possibly resulting in reputational damage for the developer, the power off-taker and the financiers, exposure to legal action, security problems, as well as interruptions to construction and/or operations.

For CBS to be effective, tangible benefits should be distributed throughout the life of projects, i.e. by adopting a life-cycle approach. Whichever the *source* of funds (discussed later in this paper), their use can be different. Broadly speaking, one can distinguish between cash and in-kind transfers:

- *Cash transfers* refer to the transfer of funds by the project proponents and/or Government to directly increase the disposable income of individual households and businesses. These can include direct money transfers to individuals or households, dividends from equity shares, subsidized electricity rates/free power, and funds for microenterprises and SMEs.
- *In-kind* benefits have more of a public nature and can include training and capacity building, preferential employment policy, physical infrastructure (water supply and sanitation, roads, rural electrification, rural irrigation systems, telecommunications), health and education facilities and services (clinics, schools, community centres, libraries, textbooks), and financial literacy programmes (often linked to microfinance programmes or other cash-transfer programmes).

⁴ In welfare economics, benefit-sharing can also be seen as a way of correcting for a ‘market failure’ resulting from the existence of an economic transaction (in this case, building and operating the hydro plant) that imposes some economic costs (negative externality) to the local communities, and for which no appropriate compensation is paid. Externalities commonly occur in situations where property rights over assets or resources have not been allocated, or are uncertain.

Although the design of CBS mechanisms should be context-specific, the international experience shows that there are six key aspects that should be carefully taken into account. These can be summarised as follows:

1. *Good communication and early engagement*: local communities' concerns and expectations regarding the project need to be listened to, and engagement should be continuous (before, and during operation) avoiding a mere one-way information flow.
2. *Definition of target group*: the target area should be defined with a view to supporting internal community stability and cohesion, and in respect of indigenous institutions, norms and practices. Local power structures and dynamics should be well understood, and benefits should be shared widely enough to avoid resentment and conflict.
3. *Timing of benefits*: Local communities need to see tangible benefits materialising early on in the project life, and even before construction starts.
4. *Legitimacy and ownership*: CBS should support local ownership, utilizing and even strengthening local institutional capacity.
5. *Governance and delivery*: CBS should be simple to administer, have a clear and inclusive governance structure, and support sustainability of benefits in the long-term.
6. *Livelihood enhancement*: CBS should support the provision of public goods, and encourage private sector growth and development in the target area.

2. Evolution and Status of Benefit-Sharing in Tina River Hydropower

2.1 The Tina River Hydro Development Project

With the World Bank's support, the Solomon Islands Government (SIG) has been developing the 15 MW Tina River Hydropower Development Project (TRHDP), which is expected to be developed by Korea Water Resources (K-Water), the main Korean state-owned enterprise responsible for water supply and hydropower.

Realisation of the project is important for the future of the Solomon Islands economy. Despite the positive recovery after the civil 'tension' (1998-2003), which disrupted the functioning of state and social institutions and resulted in a 40% decline of GDP, the economy remains highly reliant on diesel generation, and disputes around land continue to hinder foreign investment. Tina Hydro would therefore not only reduce the country's dependency on (price-volatile) oil, but also help to stimulate further large-scale investment.

TRHDP will supply renewable electricity to Honiara, the capital of Solomon Islands. The project is located in the Bahomea district of Malango Ward, approximately 30km east of Honiara. The Tina River has a catchment area of approximately 150km², most of which is mountainous, heavily forested, and unoccupied. The site of the proposed 72m high (from foundation) concrete dam and 30ha storage reservoir on the Tina River is remote and unoccupied although it has been accessed for logging operations in the recent past. All land selected for the project, including the dam site, reservoir, powerhouse, access roads, construction lay-down areas and quarries, is non-residential land, and no physical displacement of people will occur.

A dedicated Project Office (PO) sitting under the SIG's Ministry of Mines, Energy and Rural Electrification (MMERE) is responsible for bringing the project to fruition. Beginning in 2009, the PO has undertaken all aspects of the project in continued dialogue with the indigenous landowners and village communities of the Tina-Ngalimbiu Catchment and wider Malango Ward, and with the assistance of advisors from the World Bank, hydro engineers, and other local and international specialists.

Consultations with the local communities started in 2009. From the beginning, the expectations of local communities have been high with respect to the sharing of the benefits generated by the project. A "social license to operate" was required to initiate the project preparation-related activities, and for the communities the expectation of having a benefit-sharing mechanism was a strong incentive to

cooperate⁵. In 2012, the SIG decided to officialise its commitment to benefit-sharing (described in the next section), and since then has continued to engage with the communities to reach an agreement on the details of the CBS mechanisms to be implemented.

To support the SIG, the World Bank – which will finance construction and operation of the hydropower facility – is also supporting the design and implementation of a “Community Benefit-sharing Pilot (CBSP)” project funded by the Japan Social Development Fund (JSDF) with the objective to introduce and test an innovative approach to sharing the benefits generated from hydropower development with local communities. The project intends to create CBS mechanisms which may be replicable in Solomon Islands and elsewhere and are able to achieve distributional and local development goals as well as risk management objectives, as described earlier in this document. The CBS mechanisms would be additional to both the compensatory framework (Environmental and Social Management Plan, Livelihood Restoration Plan) and the stream of payments regulated by the Process Agreement between the SIG and five “core land tribes” for the acquisition of the “core land” where the project is located.

2.1 The Cabinet policy decision on benefit-sharing

In the Solomon Islands, localised grievances around land rights are not uncommon, and in the past they have caused disruptions in small hydropower, water supply, and mining operations. For example, in the case of the Buala hydropower facility, operated for 12 years, the land was never acquired due to an inability to agree upon rightful landowners. Also, periodic disagreements with the landowners of the Kongulai catchment, who have title to the land where the underground water spring that provides the majority of the capital city’s water supply is located, have been affecting access to water in Honiara. In the catchment adjacent to the TRHDP site, landowners routinely blocked access to the Gold Ridge Mine site largely because of their dissatisfaction with the implementation of the land acquisition agreements for that mining project. The experience of Gold Ridge, its centrality to the events of the civil unrest, and its shared pool of stakeholders with Tina Hydro, means that there is a high level of community expectation regarding implementation of an effective benefit share scheme that is discernibly different.

The country is not new to the concept of benefit-sharing as some mechanisms have been introduced in the past. An example is the Guadalcanal Plains Palm Oil Limited (GPPOL), a large palm oil plantation in the northeast Guadalcanal Plains, owned 80% by New Britain Palm Oil, which operates approximately 5,000 ha under a fixed-term estate lease arrangement with local landowner groups, through local trustees (Box 1). Today, the GPPOL’s CBS scheme is viewed positively by its beneficiaries. However, even though rent and royalty payments started flowing in 2008, the project did not start paying dividends until the company went into profit, which was more than a decade after commencement. In addition, due to international price fluctuations and profit fluctuations, communities can experience fluctuations in revenues⁶.

Box 1. Guadalcanal Plains Palm Oil Limited (GPPOL) and Benefit-sharing

The Guadalcanal Plains Palm Oil Limited (GPPOL) began operations in 2005, five years after the ethnic conflict, as a joint venture company between the New Britain Palm Oil Limited (NBPOL) of Papua New Guinea and landowners of the north Guadalcanal plains. An apex landowner organisation called Guadalcanal Plains Resource Development Association (GPRDA) was constituted from representatives of these landowners, to hold a 20% share in GPPOL. In addition, this organisation distributes cash benefits (land rental and royalties) to landowners on behalf of the company.

Plantation production and management is entirely conducted by the company with land rental paid quarterly and royalties monthly. Fifty percent of royalties are paid into 58 trust boards (each representing a parcel of

⁵ All the site investigations and studies for the TRHDP have been conducted with full agreement of the local landowning tribes. In 2011, the SIG entered into a “land access agreement” with the 27 land owning Malango tribes. In the agreement, the customary landowners guaranteed to provide physical access to their lands for 18 months to enable investigative drilling, and for environmental and social impact studies to be carried out. In return the SIG gave each tribe a “goodwill payment” paid into a “special account held on behalf of the landowners, and under control of the [then] Landowner Council. LALRP (2017).

⁶ For example, in 2010, no dividend was paid out by NBPOL, but in 2011, this amounted to PGK 150,660. To ensure continuous funding, the Board of NBPOL donated PGK 1 million.

registered land leased to the company) in proportion of the land area of each parcel; and the other fifty percent is paid into a Fund administered by an investment committee comprising two representatives—a man and a woman— from each of the five main tribes: Ghaubata, Thimbo, Dhogo, Lathi and Nekama. The 20% share in the company is handled by a registered company, namely the Guadalcanal Plains Resource Development Association Company Limited, with five directors representing the five tribes.

Furthermore, members of some communities in the area have opted to become outgrowers and supply palm fruit to the GPPOL operations: out-grower blocks totalling 817 ha—176 blocks ranging in size from less than a single hectare to 22.2 ha – have been established (Fraenkel, 2010). In recent years, households have been able to make considerable amounts of money from outgrowing. Five per cent of the proceeds from palm-oil sales to the company go into a fund managed by the Tetere Outgrowers' Association, which is a registered company. Out-growers can access credit from the association, and in order to repay debts, GPPOL deducts money from payments at the source.

Source: Fraenkel et al. (2010)

In the case of TRHDP, benefit-sharing was the primary subject of an awareness campaign during late 2012. This was part of a wider effort by the Government to gain credibility within the community of the Tina area, and overcome its scepticism - based on previous experiences with Gold Ridge and logging projects - towards the ability of large-scale development projects to generate tangible community benefits. Further, the SIG intended to approach the mobilisation of land in a novel manner, one that defused expectations of a “winner-takes-all” situation, which has been the norm in other land mobilisation attempts for national projects in Solomon Islands.

Following consultations with the communities, in November 2012, the Cabinet of the SIG agreed to provide a benefit share in Tina Hydro to the project-affected community. As anticipated in an earlier Cabinet official document (June 2012), the Cabinet agreed that a share of the savings from displacing diesel (currently the source of 99% of energy in the country) achieved as the result of the development of the hydro power station be shared directly with the affected community. The amount of the proposed benefit share was 15% of the net benefit to the Government from Tina Hydro, to be calculated annually. This calculation was a product of the amount of power generated in the calendar year, the cost of operating the plant, including the cost of the Power Purchase Agreement (PPA) with the developer, and the comparative cost of diesel generation at Lungga Power Station.

Not only did the concept underpinning this mechanism prove difficult to understand by the relevant stakeholders, but also it was not considered at the time that the factors in this formula could vary greatly on an annual basis, with some projections suggesting that the benefit share's value could vary between USD 100K and USD 800K, and possibly even result in no net benefit in a given year if oil prices became very low. This prompted the SIG to reconsider the mechanism, and design, with the support of donors, a mechanism more predictable and transparent.

2.2 The Exemplar Agreement

In March 2014, to advance the design of a CBS scheme beyond the Cabinet-approved concept, a formal agreement to be negotiated between SIG and the affected communities, referred to as the “Exemplar Agreement”, was drafted based on similar agreements elsewhere⁷ to provide a framework for cooperation between the parties with respect to the carrying out of mitigation and livelihood enhancement measures in connection with the project. The agreement was meant to formalise the SIG's guarantees, commitments, and undertakings in favour of the affected people. The Exemplar Agreement included provisions for a Development Corporation (with representatives of the affected people) to fund projects in the affected area with the support of a technical committee (namely a Technical and Environmental Committee). It also envisaged the creation of an Education Fund to support training and education of the affected communities.

⁷ Partnership Agreements with Aboriginal communities (‘First Nations’) are particularly common in Northern America. In Canada, Hydro-Québec, which is the largest electric utility in Canada, since the mid-70s has been committed to engaging with aboriginal communities, and gaining social acceptance through their participation in decision-making about energy projects. To date, Hydro-Québec has signed some 30 agreements with Aboriginal nations and communities regarding development projects with a view to enabling them to participate in project construction, and benefiting from the economic spin-offs.

However, the Exemplar Agreement was not pursued at the time as the process of land identification prior to land acquisition revealed the difficulty of identifying and negotiating with clearly mandated tribal representatives. In the region, previous mining access agreements have fractured community cohesion and leadership, and people have experienced highly biased access to opportunities for representation in formal fora and bureaucratic channels⁸. Under the circumstances, an Agreement could not be effectively negotiated, and instead the SIG opted to engage with communities further to better understand their needs and expectations on benefit-sharing.

As a result of that engagement, and to demonstrate their commitment to the development of the project area, the SIG took prompt action by funding a road upgrade to a school, the construction of four classrooms at each of the three schools in the area, and the maintenance of a road bridge to Tina village. Further, the SIG decided to design a pilot project to deliver early benefits during the construction period, and to investigate options for the design of CBS procedures and governance arrangements.

The following sections describe more in detail the various elements of the CBS arrangements for Tina Hydro, a share that includes - but is not limited to - the pilot project's investment in basic services and infrastructure for the local communities.

2.3 Design of a CBS for Tina Hydro

2.3.1 Benefit-Sharing for Tina Hydro during construction

The construction of Tina Hydro is expected to take four years. CBS typically includes early benefit transfers in the form of in-kind benefits such as training, employment, and infrastructure (public goods) to support local development as well as contribute to building community support early on, reducing the risk of disruption and delays, which is higher in the early project phases. The numerous consultations with the affected communities - more than 250 meetings over 4+ years since 2011 of various sizes, topic and stakeholder composition - also revealed that they expected to benefit from the project before operation.

In the case of Tina Hydro, benefits during construction, beyond compensation and mitigation measures, will include the following:

The Community Benefit-Sharing Pilot (CBSP) project

The SIG has engaged intensively with potentially project-affected communities since the beginning of the feasibility study period, and the concept of CBSP has been shaped by this ongoing dialogue with affected communities, including the strong desire among these communities, as stated repeatedly and emphatically over the years of discussions, to experience concrete local development impact. In response to that, the Pilot project will comprise two components reflecting the two highest priorities identified by affected communities through community consultations: water supply and electricity.

Most households in the affected communities do not have access to formal water supply, nor reticulated water or sewerage systems. Communities rely heavily on rivers and streams, and suffer during dry seasons and heavy rainfall when river water becomes heavily silted. Further, none of the targeted beneficiary households are connected to the Solomon Power electricity grid, and few households even make use of solar power for lighting, relying instead on kerosene lamps and wood fires for cooking.

In the light of the above, the CBSP funds (managed by the PO) will support WASH and rural electrification projects as follows:

- Water supply systems will be installed or repaired to serve the population in the target area. This is to leverage the potential of water resources in the broader catchment and to minimize the impact of dam construction on the water supplies of Tina River-using communities. These investments will provide affected communities with long-term, improved, sustainable water supply as a concrete benefit of their hosting of the project. All of 88 villages covered by CBSP

⁸ PHGC (2011).

will be initially considered for this sub-component. However, in order to attain effectiveness and the best value for money, a smaller number of villages will be selected based on a transparent set of criteria.

- The project will extend the Honiara grid up to the Tina Village through the installation of an additional 11kv transmission line and 415v, low voltage distribution lines and transformers. Due to cost limitations, the project will not finance household connections but run low voltage lines through areas which will make it easy for households to purchase service lines to connect to their homes. If there are sufficient finances available from the Output-Based Aid (OBA) project, which Solomon Power is currently implementing, Solomon Power will offer subsidies to poor households to allow them to obtain a household connection. However, the Project will finance the costs of the service lines and in-house wiring for Rate School and Konga Health Center.

The project will also have a Human Resource Development component, including pre-employment, vocational, and technical training programmes. This component will help the members of communities in the project area access the employment opportunities created by TRHDP. A roster of eligible individuals will be prepared and training designed and delivered to enhance the readiness of these individuals to secure employment. The developer will also be asked to provide a list of technical skills and services that will be needed so that technical and vocational training can be developed and provided to target beneficiaries.

Employment Benefits

During construction, up to 180 technical, highly skilled and low skilled workers may be required for the hydro construction, providing employment opportunities for an estimated 80-100 people in construction and support roles. This benefit is highly important for the local communities, particularly due to the closure of the nearby Gold Ridge mine in 2014, which resulted in the loss of hundreds of jobs.

To ensure that local people will benefit from such opportunities, the Implementation Agreement, which is the concession agreement between the SIG and the Project Company laying out the roles and responsibilities of both parties in implementing the project, contains provisions for the developer to adopt preferential hiring policies for local people. The HR Development component of the CBSP will be complementary to that by supporting the capacity building of the workforce ahead of construction.

Land rental regulated by the Process Agreement

In 2014 the SIG's Commissioner of Lands, determined that 5 of the 27 Malango peoples' tribes resident in the area were the customary collective owners of the projects-affected land. These are: Roha tribe, Buhu-Garo tribe, Kochiabolo tribe, Uluna-Sutahuri tribe, and Viurulingi tribe.

Under a written agreement with the identified owners, referred to as the "Process Agreement", the SIG acquired the land and its commercial assets by using its compulsory acquisition powers under the Solomon Islands' Land and Titles Act. The Process Agreement established that landowners would receive not only land compensation but also a 50% equity share of the Tina Core Land Company (TCLC) (the remaining 50% being owned by SIG). In addition, the Agreement established that the Project Company pay a land lease to the TCLC for the purpose of the construction and operation of Tina Hydro; and that revenues equal to 1.5% of the price paid by the off-taker to the Project Company be shared with the Tribes each year (paid quarterly) during operation. As of January 2018, three out of the five tribes have set up Tribal Cooperatives to receive these funds.

However, it is important to note that the TCLC lease revenues will be used also to finance the TCLC's administrative cost. The Project Office, which will play a hands-on role in the ongoing management of the Cooperatives until they are operating effectively, will be assisted by a qualified accountant from a private financial firm playing the role of an administrator. Funding for this role will also be sourced from the rental payments of the Developer to the TLCL.

Road network spillover effects

During construction, positive benefits such as faster and safer road transport will be possible thanks to the realignment of 13.2km of the existing Black Post Road, and the creation of approximately 5.5km of new site-access roads for the dam site and power station. Several access roads will also be upgraded

and widened, significantly improving the road network in the area. This will contribute to better access to markets, and generate opportunities for local businesses.

2.3.2 Benefit-Sharing Mechanism for Tina Hydro during operation

In addition to delivering benefits during construction, the CBSP project will introduce and test an innovative approach to benefit-sharing able to provide a stream of benefits to the project host communities for the lifetime of the Power Purchase Agreement (PPA) between the Development and Solomon Power and likely beyond.

As explained above, during operation, every man, woman and child⁹ in the Tribal Cooperatives established for the implementation of the Process Agreement, will receive a stream of land-royalty revenues (1.5% of the price paid by the off-taker minus administrative costs) directly into their personal bank accounts to avoid the pitfalls of elite capture. The CBS introduced by the Pilot project will be additional to these land-royalties funds, and reach a wider group of people.

2.3.3 The target group of the Tina Hydro CBS

The benefit-sharing scheme currently being designed is meant to spread benefits in a manner that is deemed to be culturally appropriate and broadly recognised as proper. This scheme will deliver benefits to the community that are distinct from any mitigation and compensation measures set out in the THDRP's Land Acquisition and Livelihood Restoration Plan (LALRP) and Environmental and Social Management Plan (ESMP).

The ESIA established that 1,800 people, representing approximately 362 households, would be directly affected by the project ('Direct Impact Area'). Of this, the majority (1,098 people) live in villages likely to be affected by the quantity and quality of the water in the Tina and Ngalimbiu rivers, and to experience loss of fishing areas, hunting areas, threat to indigenous land and natural resources. Some 700 people will be affected by road works and construction traffic. All people in the Direct Impact Area will be targeted by the ESMP and LALRP.

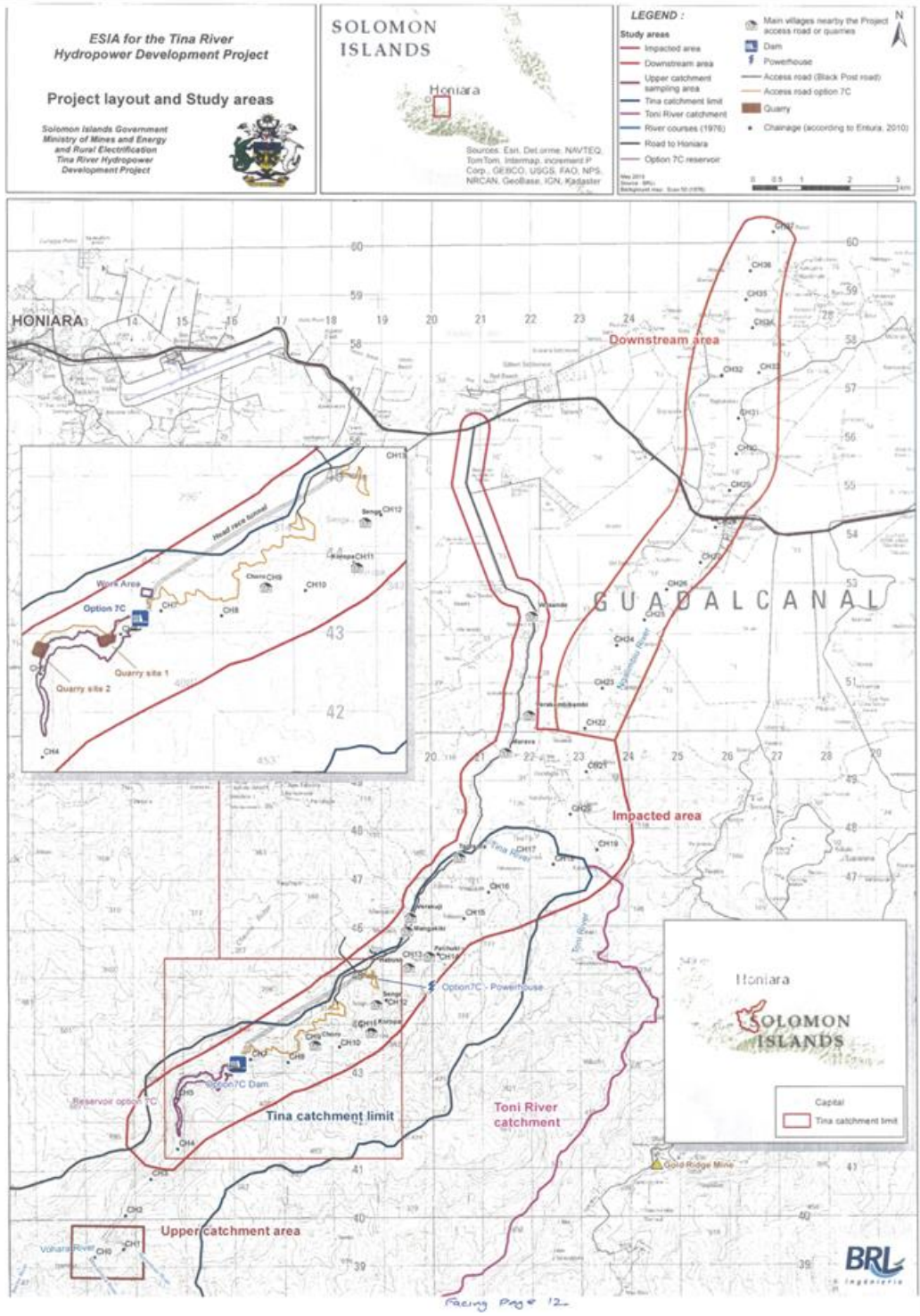
The definition of the target group for a community benefit-sharing mechanism is critical to the design, operation, and maintenance of legitimacy of any development project. In the context of the Tina River area, it is important to recognize that land and people are inseparable both conceptually and in practical terms. This is due to philosophical positions held by people, as well as the ongoing and intimate biophysical connections that they practice through their economic and social systems¹⁰.

The Tina Hydro CBS scheme is designed to recognise the cultural community that is self-defined as being Bahomea-Malango, and which is a distinct community that is properly a host of the project. The Malango and Bahomea region is an identifiable cultural region, whose existence as a cultural region is recognised and respected in the wider Guadalcanal context. This cultural community includes within itself those members of tribes indigenous to the Bahomea-Malango, as well as the residents of established villages within the same region. Importantly, this target group includes landowners, but reaches beyond that small subset to include the most vulnerable groups, including the youth, the elderly, and women living in the area impacted by the project.

Target beneficiaries are defined on a sociocultural basis, which can be determined in one of two ways. Firstly, through genealogical membership of one of the historically recognised indigenous tribes of the Bahomea-Malango area. Secondly, through residence in one of the villages recognised as being part of the Bahomea-Malango cultural community. Members of tribes historically recognised by the Bahomea and Malango Houses of Chiefs, have been registered during the period 2013-2016 and make up an estimated 5,000 people at this point. Registration prior to the implementation of the project is an important factor in ensuring that there is no encouragement to potential squatters and external influx. Geographically, the CBS region stretches from Belaha in the west to Kathihana in the east, and from Choro in the south to Veravolia in the north.

⁹ Parents of school-age children will be allowed to spend these funds on education only, until children reach the age of 18.

¹⁰ PHGC Ltd (2011). *Indigenous Terrain Mapping Report*.



2.3.4 Funding mechanisms for benefit-sharing during operation

In general, there are various mechanisms that can be used to raise funds for benefit-sharing during operation. The main funding mechanisms are summarised as follows:

1) Fiscal measures: taxes and royalties

Property tax. In some countries, the State allows local or regional authorities to directly tax dam owners on the dam's property value or other basis.

Profit-based tax (or profit sharing). This is levied on a measure of accounting profit generated by a project (generally the holding company is subject to corporate income tax).

Cash-flow based or resource rent tax (RRT): This is a cash-flow based tax levied on all current receipts net of all current costs (not financial). This method rationale builds on the equivalence between the sum of current rents and the present value of the rents generated by a project throughout its life.

Corporate income taxes. Some countries levy relatively higher corporate income taxes to the extractive industry, and this could also be applied to hydropower.

Royalties based on capacity or energy (revenue sharing): Unit-based royalties represent fixed amounts per KWh generated paid by developers to governments as soon as production starts. Fixed royalties (also called 'capacity royalties') are based on plants MW capacity.

2) Water rental

Another way to extract rent from hydroelectric projects is to impose a charge on the water. The charge can be expressed as a rental, royalty, or simply a charge for the use of the water. Such charges can be stated as ad valorem charges, as fixed charges per unit of water used. Water rental is designed to capture the opportunity cost of the water used by the developer.

3) Equity sharing

A variety of mechanisms may allow local, regional or national authorities to partly or fully own a dam project. Shareholders share the risks of the venture but also its profits, if any. Capital can be fully paid upfront, or the cost can be borne by the developer and deducted (with interest) against future shares of proceeds. The Government and local communities can negotiate for free equity. Depending on the shareholding agreements, dividends can be a share of net-profits or cash-flows proportionate to the government's or local communities' shareholding.

4) Free electricity

In this case, governments (central and/or local) negotiate to receive by the developer a percentage of energy free of cost. The government either sells its portion on its own, or takes cash payment from the operating companies in lieu of physical delivery of the commodity. In practice, this method is equivalent to revenue sharing. Alternatively, the energy could be transferred free of costs to local areas to attract investment¹¹.

Box 2 presents several international examples of benefit-sharing mechanisms.

Box 2. International legislation on hydropower benefit-sharing.

There are several countries that use benefit-sharing mechanisms for redistributing benefits from hydropower.

In **Colombia**, 3% of revenues from all hydropower projects are transferred annually to the watershed agency to fund watershed management activities working with the basin communities. A further 1.5% of project revenues is transferred to the municipalities bordering the reservoir, and an additional 1.5% must be devolved to the

¹¹ In China in the Shuikou project, the government provided free electricity to resettled communities about twice their needs so they could attract energy intensive industries into the area thus creating jobs. Generally, this approach should be carefully designed and regulated as it could generate perverse incentives with negative socio-economic impacts (e.g. over-exploitation of natural resources, dirty industry proliferation etc.).

municipalities located in the watershed upstream of the dam. These amounts must be used for infrastructure projects that have been identified in municipal development plans.

In **Brazil**, hydropower developers pay royalties, which are in effect a tax on the use of natural resources. Brazil's royalty regime stipulates royalties to be re-distributed 45% to States, 45% to cities and 10% to federal bodies. Of the 45% aimed at the municipalities, 85% goes to the areas directly affected by the plant's reservoir. The remaining 15% are distributed among states and cities affected by reservoirs upstream from the power plant. The money may be used for health, education and safety programs but not to pay staff or reduce debt, unless the creditor is the national government.

In **Nepal**, revenue sharing follows a 50-38-12 formula whereby the central government receives 50% of the royalty, 38% goes to the region(s) hosting the project, and 12% to the concerned district(s). Shareholding agreements have also been implemented in Nepal. The Chilime Hydropower Project, owned by the Nepal Electricity Authority (NEA), was the first in the country to allocate 10% equity to the people of Rasuwa district, where the project is located.

In **Norway**, the legislation comprises a number of mechanisms that ensure monetary benefit-sharing from water management and hydropower projects with regional and local communities. These mechanisms include: up to 10% of the developer's electricity production to the local authorities at production price (generally lower than market price); licence fees paid to municipalities and counties linked to the degree of environmental disturbance and the profitability of the development; taxes paid to regional and local authorities; and revenues received by counties and municipalities in the form of dividends to the owners (in Norway, many electricity production or distribution companies are owned by municipalities and counties).

In **India**, the States rather than the Central government own water resources. A revenue sharing mechanism is in place whereby Indian States are allocated 12% electricity, free of cost, for the entire life of the projects operating in the States. In 2008, the National Hydropower Policy¹² made provisions for 1% additional free power from the project to be sold and revenues to be allocated for the development of local areas by transfer to the 'Local Area Development Fund' (LADF). The State Governments are also expected to contribute a matching 1% (from the sale of their share of 12% free power) and transfer it to the LADF on a yearly basis. The revenues from the sale of 1% free electricity is transferred by the LADF via electronic bank transfers into the bank accounts of the people affected by the project, annually, and for the entire life of the project.

Finally, in **Canada**, benefit-sharing is commonly in the form of partnership agreements with Aboriginal nations and communities. For example, in 1992, the Cree and Hydro-Québec signed the Opimiscow-La Grande Agreement, with which they agreed upon remedial measures to correct the impact of the projects or to compensate for the loss of harvesting areas by increasing the carrying capacity and enhancing habitats around the project sites. Hydro-Québec agreed to provide the Cree with a C\$25 million Remedial Measures Fund, and the parties also agreed to create a non-profit corporation called Opimiscow-Sotrac Company to carry out the remedial works. To date, Hydro-Québec has signed some 30 agreements with Aboriginal Nations and communities regarding development projects with a view to enabling them to participate in project construction, and benefiting from the economic spin-offs.

2.3.5 The case of Tina Hydro: funding options for CBS

Various funding options have been considered for Tina Hydro. One important factor to be considered in choosing CBS mechanisms concerns its ability to provide a stream of revenues for the funding of development investment. During consultations, the communities have expressed the desire to improve basic-need services, and to have access to various livelihood enhancement activities. To achieve this target, a range of funding mechanisms has been considered. Not all of them, however, are a good fit for the project.

Equity sharing, for example, would be challenging to implement: the project's debt to equity project financing ratio is already high, and a change in the shareholding agreement would impact upon the equity ratios and returns required by the commercial investors and most likely require lengthy negotiations. The governance of a shareholding structure that includes the communities could be complex. Further, profits hence dividends could vary on an annual basis. For these reasons, this option would not be the most suitable for Tina Hydro.

¹² Ministry of Power India (2012). National Electricity Plan, and the 'Guidelines for Management of LADF in respect of central sector hydro-electric projects', Indian Ministry of Power.

Revenue sharing could also be achieved through levying a profit tax. However, this would need to be calculated on an annual basis by the developer, and could result in high compliance costs for both government and the company. Funding benefit-sharing through a water rental-type of mechanism would not be feasible either due to how water rights are defined in the Solomon Islands: the High Court¹³ established that flowing water is a public right, which is not owned by the owners of the land over which it passes.

The option of delivering benefit-sharing through free electricity has also been considered. However, having free or subsidised electricity in the area could attract investment and migratory flows, which could trigger tensions. In the past, ethnic conflict has been ignited by migrant people inflows into Guadalcanal, where large investment projects such as the Gold Ridge Mine were located.

A fixed levy (which means a fixed amount per annum is paid for benefit sharing) would be easy to implement, and ensure a stable flow of funds. However, by fully de-linking the benefit share from the plant's operation, this mechanism alone would be less effective in aligning the interests of the power producer, off-taker and community members for the hydropower facility to operate as efficiently as possible. To overcome the 'lack of incentive' issue of the fixed levy option, an additional unit-base energy royalty could be designed. This would correspond to a \$/Kwh charge, to be multiplied by the energy generated per billing period. The calculation of the energy royalty amounts would need to be done by the Project Company (PC) on a quarterly basis, and the cost incorporated into the bill to the off-taker. The formula should allow for some escalation adjustment.

A comparison of various mechanisms and their advantages and disadvantages are provided in Table 2.

Table 2: Funding options for the Tina Hydro CBS

Funding Mechanism	Main Features	Challenges	Opportunities
Fixed tax or levy	A fixed levy plus escalation is charged annually. Fixed cost, embedded into capacity payment like any other O&M cost.	Payments not linked to the plant's actual performance (misaligned incentives).	Simplicity. Stability of flows.
Energy royalty	PC calculates energy royalty payments based on actual energy dispatched on a quarterly basis (through metering), and add it to bill to the off-taker. Formula can be adjusted for inflation. Hydrological risk affects payments.	Add some variability to the flows, like profit sharing and equity dividends.	Alignment of incentives: payments are linked to the plant's operation.
Profit taxes	Profit taxes levied on the project annually.	Relatively higher monitoring costs for government, and compliance costs for company. Revenues from profits vary annually.	Profit-sharing mechanism clear to the communities.

¹³ *Solomon Islands Water Authority v Commissioner of Lands* SBHC 58.

Funding Mechanism	Main Features	Challenges	Opportunities
		Does not work if project margins are modest.	
Water rental	In Solomon Islands, there is no formal allocation of water rights. Flowing water is a public right, un-owned by the owners of the land over which it passes.	N.A.	N.A.
Free electricity to communities	Revenues from sales of electricity transferred to the communities, or free electricity directly delivered to the communities.	Communities have expressed other preferences. Free electricity to the communities risks triggering migration into the area and associated higher costs for Solomon Power.	Electricity increases the chance of economic development.
Equity share	This would require a change in the shareholding agreement.	Impact upon the equity ratios and returns required by the commercial investors. Dividends should be channelled directly to local communities to reduce leakages of funds. Lengthy negotiations. Governance could be complex.	Give great sense of ownership to the communities.

During the numerous village workshops held in the area, the communities have indicated the need to invest in basic-need services such as health and education as a priority: local people aspire to have greater access to schools to make it easier and safer for their children to get an education¹⁴, and to have adequate health services near the project area¹⁵. They have also voiced their expectation of improving quality of life through access to electricity, improved water supplies and incomes, better services, and better quality roads (ESIA, 2017).

¹⁴ The ESIA (2017) reports that ‘the residents of the project area have to travel considerable distances over rough roads, often on foot, to attend the basic provincial government provided health clinic at Namanu or the health post at GPPOL (Gorou health post). Even when they are able to attend the clinic, local people may not be able to obtain the drugs or treatment necessary. The main national hospital in Honiara is not easily accessible by local communities’.

¹⁵ It is reported in the ESIA (2017) that ‘from observation in the villages of the TRHDP area, school attendance is relatively low. Interviewees indicated that this was due to the labour needs of the household, low accessibility of the local schools due to lack of school transport, and poor attendance by teachers due to low salaries and/or failure of the government to regularly pay the teachers’ salaries. Some local villagers volunteered that their young people/teenagers had poor literacy skills, and were not easily employable as a result. This, in turn, leads to early marriage and child bearing among girls, and antisocial activities among boys’.

Taking the above into consideration, a CBS scheme is currently being designed to deliver two elements: a minimum guaranteed or ‘base benefit share component’, to support investment in basic-need services, which are essential to the development of the communities; and a ‘variable component’, linked to the performance of the plant (power generation) to support additional community development projects.

As shown in table 2, above, an energy royalty would be relatively simple to administer, and have shorter implementation time and lower transaction costs compared to other revenue-sharing mechanisms (equity sharing and profit tax). Compared to a fixed levy, however, it would have the further advantage of aligning the incentive of the communities to that of the project owner and off-taker, effectively making them ‘partners’ in the project.

In the case of TRHDP, in each billing period, the off-taker (SIEA) will pay the developer a ‘Capacity Payment’ (lump sum) on the basis of the tested net available capacity of the plant, in what is called a ‘take and pay’ PPA arrangement. The benefit sharing mechanism will therefore be incorporated into the Capacity Payment.

The calculations of the two recommended Benefit Share components would be as follows:

- **Base Component:** paid annually as a Benefit Share regardless of energy generation to support investment in education, and cover for fixed management costs.
- **Variable Component:** this is calculated by multiplying an energy royalty of an agreed USD/Kwh value by the energy generated per billing period.

Both the Base and Variable Components will need to be escalated annually to ensure the ‘real’ value of the funds is maintained fairly stable over time. Both the Base and Variable Benefit Share Component amounts will need to be calculated by the Project Company, and included in the itemised bill to Solomon Power. The Total Benefit Share amount, meaning the sum of the Base and Variable Components, will be deemed to represent a necessary and sufficient sum to support a meaningful development plan in the area. Having a Base Component will ensure children will benefit from a stable and predictable stream of funds to support good quality education infrastructure and service provision.

These costs will be passed through onto final consumers through retail tariffs. Following the recent tariff revision introduced in January 2017, consumers have seen a reduction in the average tariff from USD 0.85 /kWh to 0.65/Kwh. After 2020, such reduction will also be due to the Tina Hydro project starting operations. Under the new tariff system, tariff variations will occur to reflect higher/lower fuel usage during dry/wet months. Specifically, fuel costs (adjusted for heat and system losses) and PPA costs incurred by Solomon Power will be passed through onto final consumers through a “fuel charge”¹⁶. The ‘benefit sharing’ cost (being part of the PPA costs) will be a small surcharge on the power bill for those who consume electricity, whose (high) willingness to pay is revealed by current (high) tariffs. Such surcharge should be considered as the fair price the Solomon Islanders pay to the communities who have agreed to host the project to support their development.

2.4 Use and management of CBS funds

Use of funds

As described earlier in this paper, during consultations the communities have indicated the need to invest in basic-need services such as health and education as a priority. Their request is to strengthening existing services, including those provided by the provincial government, to ensure access to good quality clinics and schools. In addition to that, they expect a broad range of benefits, including access to electricity, skill enhancement to increase employment opportunities, and access to enhancing livelihood strategies and ecotourism.

During construction, as part of the JSDF-funded CBSP project, further consultations will be held with a view to preparing a detailed development plan to be funded through the CBS scheme. This could be a

¹⁶ The fuel charge is one of the four charges included in retail tariffs. The other three are: network charge, non-fuel variable charge, and demand charge.

five-year plan, in which the communities select and prioritise projects eligible for benefit-sharing funding.

Management of funds

For the Tina Hydro CBS scheme to be effective, funds should be used to support the development of the target communities, and the risk of rent seeking and elite capture should be minimised. Even though the distribution of benefit-sharing funds in the form of direct cash transfers would minimise the risk of fund leakages and elite capture, it would be less effective in supporting investment projects with a public-good nature. On the contrary, a Fund, with the due safeguards in place, is considered the best instrument to support the communities to accomplish their development goals.

The country's experience with respect to royalty distribution is not positive. For example, research shows that only a fraction of the cash from logging royalties goes to the actual owners of the forest resources¹⁷. For Tina Hydro, to minimise the risk of elite capture, land compensation and acquisition payments are being distributed directly to individual tribal members, set aside for investment, or paid transparently towards cultural expenses as set out in the LALRP.

A dedicated Fund for benefit-sharing (a Community Benefit-Sharing Fund, CBSF) is the recommended instrument for managing the funds. The Fund would support the implementation of 5-year community development investments plan agreed by the community. However, a flexible, grant-making window could be foreseen in the future (e.g. to provide seed-capital to support business ventures) once the capacity of the local communities in financial management and business planning is strengthened. Since funds will include a variable element (the Variable Component), carrying a balance from year to year would help as a smoothing mechanism.

A Charitable Trust would be the preferred legal entity for this purpose, and it is therefore recommended to register a "Tina River Community Benefit Sharing Fund," under the *Charitable Trusts Act*, and open an associated bank account for the receipt and management of benefit sharing funds. Charitable trusts under the *Charitable Trusts Act* are the most common organisational structure for NGOs in Solomon Islands. The organisations are owned on trust by a registered 'trust board', and commonly managed by an executive team responsible for day-to-day operations of the organisation.

The Fund will need to be managed according to a clear set of procedures and criteria agreed by the trustees, with project funding being contingent upon following detailed guidelines. The development of these guidelines will be undertaken as part of the CBSP project. Since the Charitable Trusts Act does not provide guidance on financial management, financial transparency safeguards and accountability mechanisms would need to be part of the Trust Deed or Set of Rules.

The evidence, when available, shows a mix picture, with such Funds in developed countries generally performing well, whereas in developing countries, political interference and poor governance have generally compromised the Funds effectiveness. Some key lessons can be learned from individual projects. Unfortunately, a rigorous review of the performance of benefit-sharing Funds globally is currently missing in the literature.

For Tina Hydro, several institutions have been considered for the management of the Fund, including government actors (the Ministry and the Province), local institutions, non-governmental intuitions (local NGOs), and the Project Company (PC).

Having local institutions managing the Fund would present a number of challenges, which are summarised as follows:

- *The Ministry of Rural Development (MRD) or the Ministry of Mines, Energy and Rural Electrification (MMERE)*. Having a Ministry as a Fund manager would increase the risk of political interference in the Fund's operations. The capacity of the Ministries is stretched

¹⁷ Wairiu (2007) outlines a typical situation for Solomon Islanders with respect to logging income: 60% of the return goes to the contractor (often foreign owned), 25% goes to the government, and the rest (15%) goes to the 'fixer' – the local licensee (commonly a local leader/chief and deal organiser who obtain the legally required Government Timber Right – who in theory distributes the money to the land owners). Source: ESIA (2017).

(support from the World Bank to the PO will end one year after commissioning); and this option increases the risk of having lengthy bureaucratic processes delaying disbursements, as well as poor transparency and financial accountability mechanisms in place. Further, during consultations the local communities reported that their negative experience with the Gold Ridge Mine Royalty Fund (whose trustees included representatives of the Central Bank, the Ministry of Finance, the Ministry of Energy and Mines, Guadalcanal Province and the Landowners Council) has resulted in a low degree of trust in authorities and state institutions.

- *The Guadalcanal Province.* As for the Ministries, the Provincial Government is not deemed to currently have the capacity to manage a Fund in an effective and timely fashion.
- *The informal Ward Development Committees (WDCs).* Community engagement in the local decision- making process is mostly through ward committees. These committees are a good example of local institutions that include informal and sub-project implementation committees who manage funds and implement community projects. The role of these informal committees is currently limited to managing funds such as the Rural Development Program (RDP) administered by the Ministry of Development Planning and Aid Coordination. These institutions currently have weak capacity to manage benefit-sharing flows, and poor accountability mechanisms in place.
- *A local NGO.* One alternative option could be contracting out the Fund management to a local NGO. There are several good local NGOs in the Solomon Islands, but currently they would have limited capacity to manage a Fund of this type, and could not ensure the continuity required for the CBS scheme. Further, NGOs are typically specialised, while the operations of the Fund are expected to cut across different sectors (education, health, skill development, small infrastructure projects etc.) and require substantial project management capacity. Nevertheless, NGOs could contribute to the scheme by cooperating on the delivery of individual investment components of the Fund.

In the light of the above, a preferable option would be giving responsibility for the Fund’s administration to the Project Company (PC). This would ensure continuity, maximize the chances of successful outcomes, minimise the risk of political interference, and provide a suitable period to build capacity within the community. It would also reinforce relationships between the community and the project.

Table 3 summarises the main limitations and advantages of the various management options against four criteria: the risk of political interference, capacity of the institutions in delivering the Fund’s objectives, the sense of ownership, and the continuity of management associated to each option.

Table 3: Fund Management Options

Fund management options	Risk of Political Interference	Capacity	Local Ownership	Continuity of management
Ministry	High	Low	Low	Low
Province	High	Low	Low	Low
NGOs	Low	Low	Medium	Low
WDCs	Medium	Low	High	Medium
Project Company	Low	High	High	High

As shown in table 3, the PC management option is the one with the best performance against the four criteria. Under this option, Solomon Power will make the Capacity Payment to the PC (under the terms of the PPA). Upon receipt of the Capacity Payment, the PC shall be responsible for transferring the Base and Variable Component amounts of the Benefit Share into the Trust Account.

The PC will provide support to manage the funds in exchange of an administrative fee. It is advised that the administrative fee be proportional to the funds managed, and include a fixed or ‘minimum guaranteed’ amount to allow sufficient administrative capacity each year.

The principles guiding decision-making should be clearly set in the Trust Deed, supporting both the management staff and governing body. The definition of the 5-year development plan should be carried out through an inclusive and participatory process able to ensure diverse community representation.

Sound management and transparent governance may also help the Fund leverage additional funds and/or catalyse donors' support (e.g. NGOs).

3. Lessons learned and next steps

This paper provides a framework for understanding community benefit-sharing (CBS), including the process that led to the design of arrangements for the Tina Hydro Development Project (TRHDP) host communities to secure dedicated benefits generated by the project. The concept of CBS is consistent with the SIG National Development Strategy 2011-2020, whose objectives include that 'the benefits of development must be more equitably shared'.

Through careful engagement and ongoing consultations over more than 6 years, the communities living in the project area have been able to voice their concerns and expectations around their development needs, areas where they would like to see a positive change. A CBS scheme will be designed to convert hydro investment-generated income into a sustainable source of financing for vital service delivery and infrastructure in the Tina area.

This process is far from over. As of the time of writing this paper, the developer, Government, and its state-owner off-taker, have yet to sign the project agreements. But this will hopefully happen soon and the CBS arrangements described in this paper will come into force and the pilot operation can begin to mobilize, especially around the training of community members in construction-related jobs. In the meantime, the following is a set of key lessons learned from the project so far, which may help to inform CBS development in other projects, particularly in low capacity settings such as the Solomon Islands:

- ***Since large-scale hydropower is new to Solomon Islands, the concept of CBS is more easily understandable and therefore more tangible to local stakeholders and Government than the complex technical and financial details of the Tina Hydro project.*** An early focus on CBS has, therefore, helped to build and maintain support for the project, providing comfort to host community members as well as political leaders who are on much less familiar ground negotiating the details of a long-term legal and financial transaction.
- ***CBS helps to take the focus off land ownership, allowing wider beneficiary coverage, and providing an opportunity for those who would not receive compensation for land and assets loss to benefit as well.*** Development projects in Solomon Islands primarily provide funds to landowners, and this can breed resentment among those feeling left out because they do not own a legal land title. In the Tina Hydro case, project consultations led a larger group of tribes to believe they would receive compensation, while in the end, the land which needed to be acquired for the project only affected a small number of tribes. Tina Hydro has long-term benefit flows for both landowners and the broader host community whose bond with the land they occupy is culturally recognised and respected in the wider Guadalcanal context.
- ***Both international and national stakeholders find it difficult to distinguish between social risk mitigation and benefit sharing, so the differences must be constantly emphasized.*** International stakeholders, including social risk professionals, tend to describe CBS either as a compliance issue to ensure that poor and vulnerable households are not worse off, or a risk management strategy preventing operational disruptions. National stakeholders understand CBS better as it should be, as good development practice introducing a mechanism to ensure that the hosts of a project benefit disproportionately relative to other project beneficiaries as their lives are subject to the most significant change as a result of the project, and providing them with the necessary resources to manage changes over time.
- ***Directing focus to long term, non-cash benefits is difficult when stakeholders are mainly interested in, and used to, short-term gains.*** To allow access to their land and resources, and to attract their political support, Solomon Islanders are used to receiving cash or household goods in return. These are benefits that can be quickly and easily consumed, leading to dependency with little emphasis on sustainability. Therefore, simply attaching CBS arrangements to PPA payments, despite the prospect of regular, long-term benefits to local communities would not be sufficient. Elements of the CBS arrangements need to come into play during the construction period through building the capacity of the local people and institutions; and intensive effort needs to be dedicated in helping the local communities keep focussed on long-term plans for prosperous and sustainable development. In the case of Tina Hydro, these activities will be part of the Pilot operations.

- ***Building community ownership and decision-making capacity is going to take a long time, but this will be worth the effort if the community can eventually operate with little need for support.*** The aim of CBS arrangements is for the local communities to draw funds from hydropower operations. However, once their institutional capacity is strengthened, the communities should operate independently of these operations. In other words, the CBS communities – as partners of the project - should take an interest in the effective operations of the hydropower facility to ensure their revenue stream, but expectations should be carefully managed to prevent local demands from escalating over time; and any dependency relationship between local communities and the project should be avoided. This is key to realizing the full potential of the CBS arrangements, and its potential for replication.

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