



Social Development Programme¹

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ADAPTING TO CLIMATE CHANGE AND SUSTAINABLE ENERGY (ACSE) GENDER ANALYSIS OF PROJECT COMPONENTS

1. Introduction to the gender analysis and methodology.

Why a gender analysis?

The Federated States of Micronesia (FSM) has committed to pursuing gender equality through adopting a national gender policy as well as regional and international treaties and agreements. The ACSE project funder, the European Union, and the project implementing partners, Deutsche Gesellschaft Fur Internationale Zusammenarbeit (GIZ) and the Pacific Community (SPC), have also strengthened their own commitments and methodologies to ensure delivery on gender equality. Globally, expectations of gender responsiveness in programming have increased and gender equality and social inclusion (no one left behind) are central to the Sustainable Development Goals (SDGs) including Goals 6 Clean Water and Sanitation, Goal 7 Affordable and Clean Energy and Goal 13 Climate Action, which are particularly relevant to the ACSE project.

Method and scope

The gender analysis was a desk review of project documentation and selected literature, supplemented by discussions with and review by the project team². The findings were circulated for comment by the FSM Energy Adviser, GIZ and SPC, before finalization.

Due to delays in the project start date, the project timeframe is tight with all components expected to be completed by March 2019. The gender analysis occurred after the determination of all project components, apart from the awareness campaign. The original project document envisaged that a specific gender analysis would be conducted on net metering at the beginning of the project where results and recommendation will be incorporated to the project activities. In addition, an impact assessment on the social and economic impacts of the project was to occur towards the end of the project.

The analysis covers:

- i. The gender issues considered in project design, the likely gender impacts, and the potential for gender responsiveness within the project components,
- ii. Enhancing gender responsiveness and inclusiveness during the project implementation phase,
- iii. The potential for a second stage sustainability and resilience project to better achieve a focus on reducing gender inequalities, and
- iv. Recommendations for the FSM ACSE project to strengthen its interventions to ensure the support improvements in gender equality and social inclusion in the FSM.

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2. Description of the ACSE Project

The ACSE project has two components, PDD6 and PDD7:

PDD6 Protecting islands through Learning and Leading in Adaptation and Renewable Energy Education programme (PILLAR-Ed) –Contract Budget: 450,000 EUR

Objective PDD6 is to increase the resilience of communities to climate change impacts and contribute to sustainable development by increasing awareness and use of sustainable energy. The project outcomes are:

- Increased community knowledge on climate change adaptation and sustainable energy
- Increased use of sustainable energy measures, where feasible, in schools in the FSM
- Increased use of sustainable energy measures at the FSM national government buildings
- Increased adaptation measures related to potential climate change impacts.

Projects:

- **Energy efficiency in schools:** Selected schools are Kosrae High School (detailed audit), Lelu Elementary School, Tafunsak Elementary School, and Malem Elementary School. The project will procure more energy efficient air conditioning (AC) units, lights, a refrigerator and some audit equipment such as motion sensors but does not have the resources to implement other recommendations.
- **Water tanks for schools:** Water Tank Project to be implemented at seven schools in the Mortlock Islands based on recommendations by Chuuk Department of Education (DoE) and data collected from UNICEF Water, Sanitation and Hygiene (WASH) representative and the International Organisation for Migration (IOM). Water Tank Capacity provided by ACSE depends on the school population and the water tank capacity already in place.
- **Energy Efficient retrofitting at the FSM national government premises in Palikir** Replacing AC units and lights with more energy efficient ACs and lights.

PDD7 Enhancing investments in small-scale renewable energy technologies in the FSM – Contract Budget: 325,000 EUR

Objective PDD7 is to enhance investments in small-scale renewable energy technologies in the FSM and contribute to enhancing energy security in the FSM with the focus on contributing to the national energy policy target for renewable energy and the reduction of fossil fuel use for power generation. The outcomes are:

- Enhancing investments in small-scale renewable energy technologies in the FSM
- Increased penetration of renewable energy (RE)
- Increased investment on small scale RE installations for grid connection
- Contribution to the achievement of national energy policy targets on RE
- Diversification of the RE mix by addition of small scale grid connected RE systems

Projects:

- **Net metering** Develop manual/guidelines for PUC on net meters; Procure net meters for the utilities in the four FSM States; Install net meters in one public facility in each of the four FSM states as pilot projects to promote net metering; Collaborate with COM-FSM on a training of the trainer for solar system installation and maintenance;
- **Awareness** Conduct an awareness campaign on energy efficiency, renewable energy and net metering.

3. Overview of gender equality and social inclusion issues

FSM faces significant challenges in terms of reducing poverty, as well as reducing inequalities between women and men. FSM fell short in meeting MDG 1, Poverty and hunger, and MDG 5, improve maternal health, due to indicators including an increased proportion of people living below the poverty line, an increase in the proportion of underweight children, high adolescent birth rate and data gaps in relation to maternal deaths. (Pacific Island Forum Secretariat, 2015). Women are more likely to be poor. In 2013, the total income of the 20% of FSM households headed by women was 9% lower than that of households headed by men. In Chuuk, which has the lowest average incomes of all the states, households headed by women had incomes that were 40% lower than households headed by men. (2013/14 HIES data cited in Castalia 2018 Annex F State Social Assessments April 2018 p 7,8).

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The indicators in Table 1 show marked differences in the extent of gender inequality and social inclusion in each state. Overall, women in FSM have little input into political decision-making, and have significantly lower labour force participation than do men, with women only 39% of the paid workforce. One in four partnered women experienced partner violence in the previous year. Chuuk stands out as having particularly low rates of electrification.

Table 1: Key social indicators in FSM states					
	Chuuk	Kosrae	Pohnpei	Yap	FSM
Male labor force participation (2010 Census)	62.7%	62.9%	70.3%	69.1%	66.1%
Female labor force participation (2010 Census)	43.3%	43.6%	49.9%	65.7%	48.4%
% of population aged 25+ who are high school graduates (UN CEDAW 2015, from Census 2010)	27.9%	55.3%	35.1%	59.3%	36.2%
Poverty rates (FSM 2013/14 HIES)	46%	21%	39%	39%	41%
No. of women in legislature/congress (May 18)	One	Zero	One	Zero	Zero
% partnered women experiencing partner violence in previous 12 months (FSM DHSS 2014)	42.6%	24.3%	13.5%	15.1%	24.1%
Households with electricity (Castalia Ltd. 2018)	30%	98%	94%	85%	67%

Cultural and gender context

FSM is culturally and linguistically diverse and the roles of men and women in society are strongly gendered and distinct across the different states and between the main and outer islands. Table 3, which is in development, captures the most significant gender roles in households. Despite Chuuk, Pohnpei and Yap outer islands (all or some) being matrilineal, and women in Chuuk having control of land, traditional leaders are men, and men are generally responsible for decision-making. Child rearing, food preparation and housekeeping on the other hand are women's roles (Table 2).

Table 2: Culture and gender norms in FSM				
	Chuuk	Kosrae	Pohnpei	Yap
Traditional leaders	Men	None now	Men	Men
Transmission of clan	Matrilineal	Patrilineal	Matrilineal	Varies
Control of land	Women	Men	Men	Men
Head of the Household	Men	Men	Men	Men
Head of Clan Members	Women	Men	Women	Men
Community Decision Making	Men	Men	Men	Men
Food preparation	Depends on the type of food	Women	Depends on the type of food	Women
Child rearing Main role	Women	Women	Women	Women
Housekeeping	Women	Women	Women	Women

Energy, gender and social inclusion

Reliable, affordable energy is recognised as an enabler of education, health and economic growth and critical to individual and family wellbeing. Technological advances, such as solar energy, are improving potential access to energy without compromising environmental goals.

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There are many needs in FSM relating to access to energy, improving adaptation to climate change, increasing access to renewable energy and improving energy efficiency. There are high levels of need for energy security. As examples, the ACSE PDD7 third technical report - progress report notes that just over a third (37.6%) of schools in FSM have access to energy, and the FSM Energy Master Plan notes a need in Chuuk state for around 1500 stand-alone electrical household systems plus 99 across 26 islands (Castalia op cit p26).

With primary responsibilities for cooking, clothes washing, care of household members and cleaning in households, women are often the main energy users in households, and conversely experience more significant time burdens from an absence of electrification, or electrical appliances than do men. Perhaps confirming the extent of income poverty, the 2010 census found low use of electrical cooking options even where there is access to grid electricity with 30-40% of households still using open fires for cooking on Weno, Pohnpei proper and Yap proper (Castalia, 2018, Appendix F, p8,9).

The Energy Master Plan conducted focus groups to explore the different energy needs and priorities of women and men. Both wanted lighting and power points. In Udot, Chuuk, men prioritized refrigerators and freezers over streetlights, whereas the women valued street lights due to the safety benefits. In both Chuuk and Yap, women highlighted washing machines as a priority. In addition, safety and health can be compromised where alternative fuels such as kerosene and firewood are used for cooking. To ensure positive gender effects, the FSM Energy Master Plan proposes to ensure that even the most remote households receive sufficient quality of power to enable the use of electric cookers (Castalia, 2018).

4. The gender issues considered in project design, the likely gender impacts and the potential to decrease gender and other inequalities

Table 3 summarises the findings on the extent to which gender has been considered in the ACSE projects. ACSE focusses on energy conservation and resilience in droughts, largely through addressing infrastructure in schools. As such no projects have the empowerment of women and girls or vulnerable groups as a principal target and only the water tanks have a strong potential to contribute towards gender equality as they aim to increase the resilience of atoll populations in times of drought.

Table 3: Overview of the findings on gender issues for the ACSE projects				
Project	Focus on gender (0-2) ³	Project sites need-based?	External consultation over project design	Potential to impact gender
Energy efficiency in schools	0	No	DoE	Not as designed
Water tanks in schools	1	Yes	DoE, IOM, UNICEF, WHO	Yes as an essential service. Positive gender impacts could be enhanced by ensuring WASH is addressed and emergency management during droughts is gender sensitive
Retrofitting FSM	0	No		Not as designed
Net metering	0	No		In Pohnpei net metering could produce a net economic benefit for around half of households without a subsidy. Any subsidies will benefit wealthier community segments
Awareness	0		Prior to commencement of the project, consultation with teachers as part of PDD6 project scope	Thus far, most awareness focussed on operational and maintenance and management staff. Proposed public-focussed awareness will be on energy efficiency, renewable energy, benefits and costs and net metering.

Projects with limited or no contribution to gender equality and the empowerment of women and girls

Energy Efficiency (EE) in Schools

The original project design envisaged demonstration projects in all four FSM states including both improved energy efficiency in schools and providing for water harvesting in selected schools. In the end, Kosrae was selected for all the demonstration EE projects, and Chuuk for water tanks.

The energy audit and replacement in schools focussed on schools in Kosrae state to minimise expenditure on travel and project coordination. The audits found considerable evidence of cost-effective opportunities. It is anticipated that classrooms will be better lit following the retrofitting, and AC improvements in computer laboratories and libraries will extend the life of computers and books. Classrooms are ventilated and do not have AC units. Indirectly, school children and their education could also benefit from the reallocation of savings made to DoE Kosrae energy bills. Other audit recommendations included installation of solar panels with net metering and a management plan for equipment maintenance. These are not included in ACSE but it is anticipated that other development partners and national government will address these through other projects.

The audit found that retrofitting was cost effective for schools, with payback times for equipment being replaced under ACSE varying from 2.7 to 6.1 years. Kosrae DoE has indicated it will now carry out audits and retrofitting in the three remaining public schools in Kosrae, and ACSE plans to publicise benefits and costs of retrofitting.

³ This is based on the UN gender marker (UNDG, 2013). **2** denotes projects which have gender equality and/or the empowerment of women and girls as the primary or principal objective, **1** denotes projects that make a significant contribution to gender equality and/or the empowerment of women and girls and **0** denotes projects that make a limited contribution or no contribution to gender equality and/or the empowerment of women and girls.

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Retrofitting in FSM government buildings

As with the school project, the retrofitting of FSM government buildings is focused on improving energy efficiency, reducing government spending on electricity, and is expected to provide some improvements to the overall lighting quality in buildings and also improve temperature control. The lighting and AC retrofitting is currently underway. No public awareness is planned with this activity.

Net metering

Net metering encourages greater penetration of renewable (solar) energy through a partnership with electricity consumers and the Utility Companies particularly in Pohnpei where there is already legislation in place, whereby consumers purchase the solar hardware for their house/business, and Utilities credit the customer for energy fed onto the grid at a given tariff. Some Utilities already facilitate grid connected photovoltaic (PV) arrangements in their states.

Net metering enables the expansion of solar energy without the need for utilities to expand their investments in solar hardware. The option of net metering is only realistic for businesses and households where the costs and benefits break even. In addition, businesses and households will need to be assessed as eligible to access loans for solar panel purchase and have suitable roofs – both accessing sufficient sun and appropriate for attaching panels. Table 4 provides estimates of costs for consumers with different size power bills and shows that with electricity bill of \$75 a month or more, net metering will be a profitable choice for households and businesses. Average household electricity bills in urban Pohnpei were around \$1000 pa or \$83 per month (2013/14 household survey cited in Castalia, 2008, p43).

Table 4: Payback period for private solar units ⁴			
Current Monthly Electricity bill (USD)	PV-size (close to optimum)	Time to pay back from savings @9% interest ⁵	Time to pay back from savings @6% interest
75	1,5 kW	12 years	10 years
150	3 kW	12 years	10 years
250	5 kW	10 years	8 years
500	10 kW	7 years	7 years
1500	30 kW	6 years	5 years
2500	50 kW	6 years	5 years

To raise awareness, the ACSE project also proposes to demonstrate solar panels and the impacts of net metering on power bills through one public site demonstration installation in each state.

The FSM Energy Master Plan recommends charging net metering users for the cost of connection. Specifically, the Master Plan recommends “require users to sell solar PV output into the grid at IPP prices, and then repurchase power from the grid at consumer tariffs.” (Castalia, 2018 P 24/25). The ACSE project is considering subsidising the costs of the private solar units to encourage consumers to opt into net metering. From a gender equality and social inclusion perspective, subsidies are not recommended as they would provide a windfall gain to larger businesses and wealthier households who will be the main beneficiaries of net metering.

Projects with potential to contribute to gender equality and the empowerment of women and girls

Water tanks in schools

The focus of this project is to ensure adequate supplies of fresh, drinkable water for local communities during droughts. The project decided on Chuuk as the state for water projects as it has a high risk of drought through its inhabited atolls. The location of water tanks at schools aimed to ensure access for all the community. To select schools with inadequate water storage, the project drew on assessments by Chuuk State Department of Education (DoE) and Project Management Office PMO (Chuuk), the IOM and a UNICEF WASH adviser to Chuuk state. SPC’s water programme and the World Health Organisation (WHO) were consulted in relation to water storage options and daily water

⁴ Christopher Frenkel estimates. The expected life of solar units is at least 20 years.

⁵ based on borrowing to cover the costs of the solar unit and paying back a loan from electricity bill savings

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requirements. From the list of schools needing more capacity, the project decided on seven schools clustered on a small group of the Mortlock islands in order to gain efficiencies from transporting equipment etc (Frenkel, 2018).

The project focusses on the supply of fresh, potable water in drought situations. It prioritises social inclusion through the location of water tanks in outer island atoll schools (where water is publically accessible). This will significantly reduce a key point of vulnerability for already vulnerable populations.

Gender roles are strongly defined in the Mortlocks, and women's acquiescence to men is expected. Women in the Mortlock islands are more affected by shortages of clean water than are men as due to their family roles as carers, and carrying the main responsibilities for cleaning and cooking. Without gender sensitive water management during droughts, there is a risk that those distributing water during droughts will not have a full understanding of the different needs in the population and may therefore not distribute in the most effective or fairest way.

Moreover, WASH facilities in schools are commonly inadequate to meet the needs of menstruating girls and women. Four of the seven selected schools have no basins for hand washing. Other challenges could include non-functioning toilets, lack of privacy, lack of toilet paper, and no safe disposal or washing options for used sanitary items. In a study in Melanesia, inadequate WASH facilities contributed to unhygienic menstrual management practices, as well as absenteeism from school and work. (Burnet Institute, WaterAid Australia and the International Women's Development Agency, 2017).

The ACSE project sees itself as responsible for providing the water storage only. The DoE in Chuuk to support the schools' capacity to manage the water tanks and work with the Chuuk Environment Protection Agency (EPA) to ensure the water supply is potable. It is looking to the DoE to ensure water is not contaminated by maintaining roofs in good order. There is an intention that a UNICEF project will follow through on WASH issues in two of the seven schools.

The project could more definitively partner with UNICEF to ensure all schools have effective WASH systems so that the schools become good case studies of the potential benefits from a publicly located water supply

Considerations of how schools ensure equitable access to fresh water during droughts could be incorporated as part of the school emergency management plans instituted throughout FSM as part of disaster preparedness since Typhoon Maysak (IOM presentation to FSM environment conference, September, 2018). This indicates a need for the project to liaise with the Chuuk DoE and Disaster Management Office to ensure that appropriate plans are in place.

Awareness raising

The project proposes to produce, publish, and disseminate to participating communities educational and awareness materials on the sustainable energy options and climate change adaptation measures developed. At the project planning stage, a communication strategy was developed.

Project documentation for PDD6 noted that a stakeholder analysis, involving officials at state and FSM, and carried out for both PDD6 and PDD7, found that more community awareness is needed in relation to climate change impacts and the benefits of energy efficiency. Educational materials are needed for schools, communities, and the general public. The consultation advised that materials be developed in local languages, appropriate for visual learners, and with hands on components. The PDD6 project plan indicated an expectation of 7000 printed materials translated in the four FSM state languages, plus reprinting of previously produced and awareness and educational materials provided to schools and communities. Awareness raising has not begun, and the communications plan needs updating.

5. Enhancing gender responsiveness and inclusiveness during the project implementation phase

Projects with limited or no contribution to gender equality and the empowerment of women and girls

Energy Audits in Schools and Energy retrofitting in FSM

These projects are tightly focused on energy efficiency in institutions, and do not have specific gender components. The original project design envisaged local language publicity about climate change adaptation and renewable energy being distributed to schools in all four states. Discussions with project personnel indicated that targeted information as well as technical support to the state DoEs may be needed to kick start similar upgrades in schools in the other states⁶.

Net metering

There is no opportunity for net metering to enhance gender equality. The implementation work involves training electricians and construction personnel, who will be primarily, and possibly exclusively, men, to install the solar panels. The project will also ensure that the FSM Development Bank has accurate information with which to promote loans for those opting into net metering.

The project is relatively small and has a tight time frame, so it is not realistic to create a pipeline of women to be trained as installers. That said, there is potential for future projects to consider how the cadres of women solar engineer graduates from Barefoot College in India can reinforce and align their skills with those needed to support the expanding stand alone and mini-grids solar systems that are being expanded in the FSM. The quality of the information produced on net metering and the break even points for loan repayments, is likely to be critical to optimal take up.

Projects with some potential to contribute to gender equality and the empowerment of women and girls

Water tanks in schools

As noted, the water tanks will deliver on a key component of climate change resilience for some of the poorest and most isolated communities in FSM. That said, ACSE is effectively providing componentry, and training on water catchment components; Upon completion of installation, water storage tanks will be handed over to Chuuk DOE to manage, and to implement water rationing during droughts. Currently there is no plan for other training or for exploring the potential to realise the many potential benefits for gender equality through the ACSE project.

Awareness raising

The project has set a budget of Euro 33,000 for all information, education and communication (IEC) materials. IEC product development is being supported by an SPC communications adviser based in Suva who is not a member of the project steering committee and has not been on site in the FSM.

There are some very specific communications needed to support effective implementation of the ACSE initiatives, namely:

- Information on the costs and benefits of net metering, and demonstration projects on how it works, so that people will confidently take on loans for their own installations
- Information for DOEs and schools in Chuuk, Pohnpei and Yap on how to improve the energy efficiency of their schools, the costs and benefits, and implementation tips.

It was envisaged that information provided to the public will include publication/posters on efficient energy management/practices, types of energy efficient lightings/ac units). Education and awareness components that target

⁶ Christopher Frenkel, personal communication

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state and FSM officials who will be responsible in some way for equipment management and maintenance is underway and is not included in the IEC budget.

Table 5 indicates where community awareness will support project outcomes. Suggested indicators are sex-disaggregated where possible to capture the effectiveness of messages to both genders.

Table 5: Potential contribution of communication elements to achieving the project outcomes and possible indicators		
Outcomes for PDD6	Considerations during implementation	Possible indicators
Increased community knowledge on climate change adaptation and sustainable energy	This requires a broad education and communication strategy. However the duration of the project is too short for measurement of behaviour change	Understanding of ways to improve energy efficiency (male/female) Assessment post education/awareness sessions men and women who practice energy conservation
Increased use of sustainable energy measures, where feasible, in schools in the FSM	This requires action on the part of DoE with states and school management. It is also likely to require technical support	Number of additional schools that have introduced EE throughout FSM
Increased adaptation measures related to potential climate change impacts	Community awareness will be essential to ensuring access to water during droughts	awareness of women and men in Mortlock communities of their right to access water from school when in need and conservation measures
Outcomes for PDD7		
Increased penetration of renewable energy (RE)	Focus on the economics of net metering	% of businesses and households who could gain financially from net metering who participate in program

There are many energy projects in FSM, and other sources of information materials on climate change adaptation. Specifically, the IOM's CADRE program has produced information on climate change in the main FSM languages.

The communication strategy needs to be updated to take into account the project's specific communication needs to ensure adoption of project components as well as wider awareness raising about energy efficiency, renewable energy and climate change adaptation. There may be potential for ACSE to partner with others to use its budget more effectively in the broader-based education initiatives. Depending on timeframes, this may would also provide an opportunity for follow up on the effectiveness of communications. The focus on raising awareness through schools is consistent with evidence on the receptiveness of youth to new ideas and their potential to influence their parents. As noted in Table 1, the proportion of adults who are high school graduates is relatively low, especially in Chuuk and Pohnpei, so dissemination of messages will be enhanced by the use of local language.

Given women's higher time burden from the absence of electricity or improved cooking and washing facilities, consideration was given to whether there might be potential to target information specific to these needs. However, this does not fit well with the outcomes for either PDD6 or PDD7 and, given time frames, may be best considered as part of a follow up project.

6. How a future GIZ and SPC sustainability and resilience project might better achieve a focus on reducing gender inequalities

Projects reduce gender inequalities when they include a focus on equality and vulnerability issues in outcomes and follow this through in project design and implementation (EIGE, 2016). GIZ and SPC have considerable expertise in the area of energy planning, and both organisations have internal expertise on gender equality and social inclusion to design a follow up project more focussed on addressing gender inequalities and social inclusion.

ACSE has built a relationship between partners and the education system so a priority for a follow-up project could be electrification of schools. ACSE's entry into water management also opens the door to potential projects involving water security alongside energy security in atolls. It could also use GIZ's international strengths to focus on energy efficient and affordable domestic appliances to reduce domestic work. Table 6 provides a summary guide on how to improve gender responsiveness.

Table 6: Gender responsiveness⁷ and pointers for future projects	
Expectation	Pointers
systematic integration of gender considerations	Gender capacity within the project team and a focus on opportunities to enhance gender equality from inception
gender balance in decision-making	This will typically occur through broadening project reference groups as well as supporting key players such as the Utility companies to mainstream gender in both the company and board
Gender-responsive implementation	Maintain a focus on gender indicators, use consultation to ensure responsiveness, include responsiveness in training
Capturing gender impacts in monitoring and evaluation	SMART indicators and consistent reporting against them.

⁷ These expectations are articulated in the UNFCCC Gender Action Plan endorsed at COP 23 <https://unfccc.int/resource/docs/2017/cop23/eng/11a01.pdf#page=15>

7. Recommendations for the FSM ACSE project to strengthen its interventions support improvements in gender equality and social inclusion

Recommendations to improve the gender positive impacts of the current ACSE project.

- i. FSM DoE and ACSE promote and support energy efficiency in schools in other FSM states that build from the findings of the Kosrae pilot energy efficiency project. This may require technical support as part of a follow up project.
- ii. Net metering should proceed on the basis of full cost recovery and there is no justification on gender equality or social inclusion basis for subsidies for private solar units.
- iii. Consistent with the FSM Energy Master Plan, ACSE advises that under net metering buy back prices take into account the costs of connection.
- iv. At demonstration sites, and within their communications, ACSE ensures electricity consumers have accurate information to make decisions on purchasing their own solar equipment in order to participate in net metering.
- v. That in addition to implementation planning and monitoring for water tanks in Chuuk, ACSE work with UNICEF, the Chuuk Disaster management office, and other partners to ensure the impacted schools have access to WASH support and inclusive planning for managing water in a drought.
- vi. Note that school-based communications can be effective in raising household awareness through youth advocacy, but education levels of adults suggest information materials need to be published in local languages.
- vii. That ACSE and the FSM Department of Resource and Development coordinate with other development partners engaged in energy projects in FSM to ensure maximum impact from community awareness related to adopting renewable energy, energy efficiency, and developing resilience to climate change.

Recommendation to improve gender equality and social inclusion in a follow up project

- viii. That GIZ and SPC, in tandem with FSM Department of Resource and Development develop a stage 2 sustainability and resilience project and considers including the following:
 - a. A focus on meeting the basic needs of vulnerable populations and assisting FSM to meet the sustainable development goals
 - b. Building from the relationship built between ACSE partners and the education system to consider electrification of schools as a priority element that will improve the quality of education for some of the most vulnerable FSM citizens.
 - c. Build from the water management expertise to prioritise potential projects in atolls involving water security alongside energy security
 - d. Draw on GIZ's international experience and promote energy efficient and affordable domestic appliances.

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