

ArtTEK Tanna: Nainé Resilient Societies Center (ATT-NRSC)

[TEK – a mainland academic acronym meaning Traditional Ecological Knowledge]

Funding Administrator: VANGO	Funding source: Private and Philanthropic Donors, UN GEF-SGP
Total funding: Program A Breakdown TBD by June 2013	Duration: Sep 2011 to Dec 2014
Status: Stakeholder Council Building through Phase 1 Implementation	Project type: Youth & Community Training in Renewable Energy & Mitigation of Forest Degradation; Supporting Institutional Policy development around Community-level Resilience and Whole Systems Solutions to Climate Change
Sectors: Climate Change Adaptation; Disaster Risk Reduction; Renewable Energy Systems Training	Scope: Local, National and International
Lead Gov. Agency: Vanuatu Meteorology and Geo-hazards Department (VMGD)	Other GoV Agencies: VANGO, Department of Forestry, National Training Council
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Objective:

To initiate and formalize youth training, cultivating future generations who model village-scale implementation of Vanuatu's National CC/DRR Framework – beginning in Middle Bush, Tanna.

To mainstream climate change adaptation skillsets across core community practices, policy and decision-making as a means of supporting traditional village life in Vanuatu.

Description:

ArtTEK Tanna: Nainé Resilient Societies Center consists of two separate programs with differing objectives and implementation strategies. Program A: TEK & Tech Youth Champions is the subject of this brief. It encompasses youth outreach and community training that brings outside experts to conduct ongoing training and workshops in Climate Change Adaptation. Central to this training are renewable energy systems operations and maintenance paired with sustainable forestry of rapidly-renewing building and fuel stocks. These include cash crops or incentivized agro-forestry that mitigate forest degradation (like sandalwood,

kauri, canarium and namamau) with additional focus placed on large-diameter bamboo and coconut. This focus on fusing economic benefits with climate change adaptation and mitigation strategies is reinforced through knowledge transfer between local communities and visiting experts. Such experts bring news of global best practices in eco literacy and environmental conservation which integrate with local kastom to strengthen climate change mitigation practices at the village level in Vanuatu.

Program B: TEK & Tech Resilience Innovators focuses on increasing resilience to climate change worldwide through integration of indigenous management strategies. It will be implemented by ArtTEK Tanna's New York-based Directorial Board & Team through an Administrative Agreement between the governing board and this project's Community Co-Founders in Middle Bush, Tanna.

Framework Priorities Incorporated into ArtTEK Tanna:

PIFACC (Pac Islands Framework for Action on Climate Change):

T4 – Education, Training and Awareness

O4-1 Strengthened human capacity to monitor and assess environmental, social and economic risks and effects of climate change.

O4-2 Strengthened human capacity to identify, analyse and implement cost effective adaptation measures as well as greenhouse gas reduction measures and creation of a pool of informed resource persons conversant with development of practical steps in adaptation tools and methods.

O4-3 Strengthened human capacity to identify and integrate economic, scientific and traditional knowledge into adaptation and greenhouse gas reduction practices.

T5 – Contributing to global greenhouse gas reduction

O5-1 Energy efficiency actions and cost effective technologies promoted and implemented.

O5-2 Cost effective renewable energy technologies and local sources promoted, shared and implemented.

T6 – Partnerships and cooperation

O6-1 – Existing and emerging international partnerships for the Pacific islands region on climate change and related issues strengthened and established.

O6-3 – Climate change related assistance from development partners coordinated and harmonized to maximize benefits to PICTs.

HFA Priorities:

HFA-3 – Use knowledge, innovation and education to build a culture of safety and resilience at all levels.

HFA-4 – Reduce the underlying risk factors

RFA Priorities:

RFA-1 – Governance-Organizational, Institutional, Policy and Decision making Framework (for community-level implementation of CCA)

RFA-6 – Reduction of underlying risk factors

Vanuatu National Framework Priorities:

[VUT2 - KNOWLEDGE BASE](#)

[VUT3 - COMMUNITY PREPAREDNESS AND RESILIENCE](#)

[VUT5 - ENERGY & EMISSIONS](#)

[VUT6 - PARTNERSHIPS & COLLABORATION](#)

Activities to be Implemented Under Program A – TEK & Tech Youth Champions:

ArtTEK Tanna’s Cultural Integration of Climate Change Adaptation, agro-forestry and energy-manufacture practices designed to support resilient communities –

ENERGY and EMISSIONS (VUT5)

- EMISSIONS – Mitigate Forestry Resource Consumption / Current or Future Forest Degradation

- A. Introductory Training for local Conservation Practices [currently encouraged in the R-PP]
- B. Experimental development of Permacultural, Inter-cropped and Agro-forestry farming to address issues relating to impact of climate change with an initial concentration on coconut, large-diameter bamboo and sandalwood.
- C. Ongoing Global Best-Practice Training in Permacultural and Agro-Forestry Cultivation of Large Diameter Bamboo

- EMISSIONS – Upgrade Agriculture Crops to Sustainably-Managed, Renewable Commodities

- A. Ongoing Global Best-Practice Training in Permacultural and Agro-Forestry Cultivation of Coconut
- B. Introduction of large-diameter bamboo and sandalwood crops as alternative to commercial coffee

- ENERGY – Introduce Technology Training in Economic Support Structures that reinforce adaptation

- A. Ongoing Introduction to renewable energy systems (includes progressive training in Solar, Wind and Micro-Hydro) which graduate to Operations & Maintenance Seminars (O&M)
- B. Ongoing Training in Manufacture of small-batch 100% Coconut-based Biodiesel, supporting REDD+ AR activities to increase forestry/carbon sequestration/biofuel production capacities (R-PP pg. 36)
- C. Cultivation of Visiting Stakeholder and International Expertise Network (Phase 2 implementation)
- D. Local manufacture and sale of solar lanterns
- E. Service and repair training in battery restoration and small solar system operation & maintenance

Each of these components have been selected in collaboration with the lead villages for suitability to the region to further minimize forest- and fuel-generated GHGs by fostering cultural command of existing solutions already in place across Middle Bush, TAFEA and Vanuatu.

KNOWLEDGE BASE and COMMUNITY PREPAREDNESS AND RESILIENCE (VUT2&3)

- Enhancing Village-level Awareness across Middle Bush (in areas of CCA, GHG-Avoidance and Conservation Training)

- A. Ongoing composting, trash separation, grey and black water management
- B. Ongoing localized workshops to disseminate consistent CCA & DRR messaging amongst all stakeholders
- C. Develop Grassroots Information, Communication and Engagement Strategy or TEK & Tech Curricula for Renewables-driven CC & DRR
- D. Potentially train ArtTEK Tanna Youth & Community participants in data collection concordant with Department of Forestry Carbon Monitoring (Phase 2 implementation)
- E. Cultivate Youth-driven Visibility and Communications Activities
- F. Compile video and electronic educational resources in global best practices related to resilience

PARTNERSHIP AND COLLABORATION (VUT6)

- A. Aid Department of Forestry in “defining suitable operational boundaries for subnational implementation” (see R-PP, pg. 43) by establishing village-level stakeholder feedback
- B. Further National Framework goals of the “TK Climate Forecasting” endeavour to enable coordination and collaboration of cultural, scientific and development stakeholders involved in climate and disaster related projects in Vanuatu through (Phase 2 implementation):
 - Identification of local communities that use traditional knowledge for environmental forecast applications, particularly at the seasonal timescale.
 - Determination and documentation of the traditional indicators used by these communities.
 - Documentation of possible historical information on the traditional indicators, i.e. past dates/timing of the traditional indicators.
 - Train personnel [in Middle Bush communities] for continuous monitoring and archiving of these indicators.
- C. Shared Reporting on Grassroots Lessons Learned and Best Practice Adaptation (Phase 2)
- D. Partner with VRTDCA (RTC system) at national level to share curricula and youth instructors (Phase 3)

Progress to Date and Current Activities:

Since December 2010, ArtTEK Tanna has cultivated CCRR practices related to the educational, economic and environmental aims of youth in Middle Bush, Tanna. After completing a formal Community Needs Assessment and Technological Feasibility Study in 2010/11, our leadership built seventeen formative partnerships in 2011/12 with local, national and international organizations working in the environmental and social justice arenas while conducting four professional-level introductory courses, locally:

- Introduction to Solar Systems (2010)
- Operation & Maintenance of Solar Systems (2011)
- Use of Large Diameter Bamboo in Construction Framing (2010)
- Battery Restoration (2012)

Building on successive skillsets, these workshops have been implemented among 40+ Middle Bush youth and community leaders with a focus on the ways each of these practices relate to conservation, CCA-DRR and service businesses. The first two years of implementation involved stakeholder cultivation resulting in a mature outline of programming and curricula commencing year three. Leadership currently consists of one full time co-founder/staff member, one permanent technical advisor (a remote locations and renewable systems specialist), and a Middle Bush Community Advisory Council representing five tribes, which completed its first informal meeting on 2 January 2013. Funding in 2013 will be sought under ArtTEK Tanna through UNDP’s GEF Small Grants Program, US-based private donors and philanthropic foundations. With an NAB endorsement and REDD+ implementation team consultation, efforts to fulfill REDD+ requirements through the activities outlined here will resume in July 2013 when ArtTEK Tanna completes a formal CBO recognition process through the UNDP GEF-Small Grants Program. To date, twenty-eight local, regional and national meetings have been held to establish relationships with 17 key stakeholder organizations. This has resulted in endorsements and abiding partnerships underway with VRDTCA, VANREPA, Tafea Nico, Vanuatu Cultural Center, Tafea Cultural Center, UNDP (GEF-Small Grants Program), along with US-based Solar One, Cooper Union’s Nerken School of Engineering and other contributors capable of cultivating lasting and resilient climate change solutions in the Pacific.

ArtTEK currently operates or seeks to operate within the declared intersection of “civil society” and “government sector” precepts outlined in the current R-PP, namely:

Stated REDD+ or R-PP Need (R-PP, pg. 17)	Pilot’s Accomplished or Intended Need Fulfilment
Fully informed and prior consenting land owners	ArtTEK Tanna holds a current MOU among 5 tribes
[Involvement of] Community based organizations	ArtTEK Tanna CBO being formed through VANGO/GEF-SGP
[Cultivation of] Implementation of safeguards	Connecting renewable energy and biodiesel training to select National Framework practices is designed to reinforce the economic and food-security merits of agro-forestry and other CCA practices, by generating more economic and traditional kastom income from emissions-reduction practices
Maintenance of bio-diversity	Initiation of small-scale Sandalwood agro-forestry began in ArtTEK Tanna’s lead village in mid-2012. Offset of hardwood afforestation through cultivation of large diameter bamboo as framing material in building stock will begin in early 2014
Environmental and sustainable forest management principles	Intended community education and ongoing familiarization of stakeholders with R-PP & REDD+ forest management principles through demonstration
Technical capacities (community forestry development, carbon sequestration assessment capability, national forest inventory).	ArtTEK Tanna will cultivate ongoing training which can contribute to and/or incorporate National Framework implementation material to meet REDD+ standards
Fully-enabled communities that participate (community commitment) and [foster ideal] environment and framework conditions	ArtTEK Tanna communities have evidenced commitment since December 2010 (1 st MOU), mid-2012 (1 st Sandalwood planting) and now seek formalized engagement
Cultivating REDD+ success through full participation of [pilot] communities	ArtTEK Tanna communities have expressed interest in piloting suitable practices in full participation to discover best practices

Most ArtTEK Tanna Phase 1 and 2 activities will be carried out between 2013-2020.

Background and Additional Qualifying Considerations:

Two significant arenas threaten Vanuatu's future: socio-economic stability among its youth population and geologic/climate risks. The country's vulnerability is further amplified by a narrow economic base and a number of other factors including a predominately rural population reliant on subsistence agriculture and highly polluting energy resources including locally harvested firewoods coupled with diesel used in generators. Tanna is the island with Vanuatu's highest deforestation rate and densest population. Accordingly, this project emphasises specific climate change adaptation components of the Reducing Emissions from Deforestation and Degradation Plus program (REDD+) ideally suited to the challenge Tanna faces.

Since 1999 Middle Bush Chief Jack Kapúm has sought development partners capable of operating with respect to kastom and biodiversity traditions in his region of Tanna. His stated ambition for such development include bringing youth education/training that facilitates a balance of traditional and monetary economies. He hopes this can result in the completion and staffing of a new health clinic. After the formation and dissolution of four partnerships, each ending for the most part over an overreach of mainland partner's intentions for land use, Chief Kapúm approved and cultivated local support for ArtTEK Tanna's pragmatic grassroots approach to youth training in September 2011. Coupled with its international program designed to attract technical and cultural expertise from within the Resilience Movement, the chief has rallied collective leadership to renew an MOU dedicating considerable land, time and regional kastom support to this project. That local support has grown to encompass five partner tribes in Middle Bush with the Lumé and Green Hill Rural Training Centers serving as early, ongoing support locations for curriculum delivery with the TAFEA Cultural Center indicating a willingness to further outreach efforts. This project seeks financial resources to establish effective and ongoing training for improved climate change practice in communities across Middle Bush and RTCs across Tanna.

In December 2012, the UNDP's Vila Office initiated an exchange between ArtTEK Tanna's leadership and the Global Environmental Facility Small Grants Program. In 1992, the GEF-SGP was established to provide financial and technical support to projects that conserve and restore the environment while enhancing people's well-being and livelihoods. Working in collaboration with the Office of the Secretariat of Vanuatu Association of Non-Governmental Organizations, GEF-SGP has granted program funding to fifty community projects, nationally. In 2013, they are seeking renewable energy projects anchored in mitigation principles outlined in REDD+. To date, the program has raised and disbursed US\$7M in Melanesian funding with nearly US\$1M (\$921,000+) granted in Vanuatu. ArtTEK Tanna will work with them throughout the year to establish community support for continued training.