

**Pacific-German Regional Program on
Coping with Climate Change in the Pacific Island Region**



CCCPIR Vanuatu 2012
Summary Annual Report to the Government of Vanuatu

Contents

CCCPIR Project Background and Objectives:	2
Rationale for SPC-GIZ CCCPIR Program.....	2
Methodological approach and components of support.....	3
CCCPIR Components and Outcomes in Vanuatu:	4
COMPONENT 2: Mainstreaming Climate Adaptation Considerations.....	4
COMPONENT 3: Implementing Adaptation and Mitigation Measures	8
COMPONENT 5: Sustainable Energy Management	9
COMPONENT 6: Climate Change Education	10
Governance of the CCCPIR in Vanuatu	10
DSPPAC Budget Breakdowns 2012	12

CCCPIR Project Background and Objectives:**Quick Facts:****Project Duration: 01/2009 -12/2015****Total Program Funding (Regional including Vanuatu): 17.2 million Euros****Implementation Partner: Secretariat of the Pacific Community (SPC) & Secretariat of the Pacific Regional Environment Program (SPREP)****Project Countries: Vanuatu + 11 other PICs****Funded by: German Federal Ministry for Economic Cooperation and Development (BMZ)**

The overall objective of the program is as follows:

The capacities of regional organizations in the Pacific Islands region and its member states to adapt to climate change and mitigate its causes are strengthened.

CCCPIR generates outputs for all the independent member states of the Secretariat of the Pacific Community (SPC) including the Federated States of Micronesia, the Republic of the Fiji Islands, Kiribati, the Marshall Islands, Nauru, Palau, Papua New Guinea, Samoa, the Solomon Islands, Tonga, Tuvalu and Vanuatu.

Rationale for SPC-GIZ CCCPIR Program

The Pacific Islands are among the countries most threatened by climate change although there are considerable differences between and within the islands. In this context, the region is taken to include all the independent member states of the Secretariat of the Pacific Community (SPC). The threat takes the form of high population density and growth, a shortage of natural resources – especially land and drinking water –, the particular susceptibility of the small, low-lying land masses to natural disasters and rising sea levels, poverty, poorly developed infrastructure and energy systems, and the economy's high dependence on imports. The pressure on natural terrestrial and marine resources is already leading to unsustainable use of these resources. It is reducing the natural resistance and protective function of ecosystems, and is threatening the livelihoods of the communities that depend on these ecosystems. High energy costs and low energy efficiency coupled with fragmented energy programs and insufficient regional cooperation are also compromising the Pacific Island states' capacity to reduce GHG emissions. Tourism is for some countries the most important source of income and it employs particularly large numbers of women. Tourism in the low-lying island states is not only threatened by future climate change but also offers potential for mitigating greenhouse gases. Due to the special role of women and children in providing food and water and managing household affairs, they are particularly severely affected by climate change and natural disasters.

In these small countries, the human resources and basic information needed to identify and implement ways of adapting to climate change and reducing GHG emissions are severely limited, as is the institutional basis for effective planning and coordination of the measures involved. The regional technical organizations (CROPs) are not yet in a position to provide sufficient support and effectively fulfill their mandates in the field of climate change. The important role of the education sector for awareness raising on causes and impacts of climate change and support of adaptation capacities of future generations in the Pacific Island countries has been neglected.

The Pacific Islands region is an increasingly important recipient of the donor community's technical and financial support services. Several donor and partner coordination forums exist, but none of these covers the entire region, and they use different basic data. The top-level planning framework for climate-related activities within the region is the Pacific Islands Framework for Action on Climate Change (PIFACC), for which an action plan has been drawn up. All donor-financed projects make reference to PIFACC, but there is no common planning process or matching of outputs, outcomes or results against this planning framework.

The poor capacity of agriculture and forestry, coastal and inland fishing and the tourism and energy sectors to adapt to climate change and mitigate GHG emissions is jeopardizing sustainable development (the core problem). This situation is increasingly compromising the achievement of key development indicators.

SPC-GIZ's Coping with Climate Change in the Pacific Island Region project aims to fit into and enhance the existing matrix of donors and adaptation initiatives in Vanuatu, rather than duplicate and/or compete with them. GIZ-SPC CCCPIR has been able to immediately and flexibly enable members of the National Advisory Board on Climate Change and Disaster Risk Reduction to trial and make an initial start on urgent climate adaptation activities while awaiting major climate funding from the Green Climate Fund recently discussed and agreed in Cancun, Durban and Qatar.

The SPC-GIZ activities are intended to be flexible, fill gaps in other, larger projects, be hands on and ground based, and expand NAB's toolbox from which one can pull "tried and tested" community adaptation activities in response to questions and requests from villages throughout Vanuatu. As such, all lessons learned have been and will continue to be documented and shared freely among stakeholders for the widest possible impact.

Methodological approach and components of support

CCCPIR pursues a multi-level approach (regional, national, and sub-national/local), and works jointly with multiple government sectors and actors in member countries. In view of the inadequate human and financial capacities of small Pacific Island countries, a regional approach is vital to achieve planned results. Exchanging experiences and effectively improving the way countries adapt to climate change and reduce GHG emissions as well as broad knowledge transfer about local, gender specific impacts of climate change and adaptation options is only possible as part of a regional approach. Experience gained at local level and by private actors will percolate up to national and regional level and is used to develop conditions and services for adapting to climate change and reducing greenhouse gases.

The German input primarily involves the following components of support: expert, organizational, process, strategy and policy advice by international, regional and national short- and long-term experts, basic and more advanced training, and the supply of materials and equipment.

CCCPIR Components and Outcomes in Vanuatu:

To achieve the overall objective, the six project components have been collaboratively developed with partner countries, under which national program activities have been aligned. The first component is cross-sectoral and regional in nature, focusing on organizational, strategic and technical advice. The aim here is to improve the capability and coordination of the regional organizations in the interaction between, in the donor community and in cooperation with the countries. Component 2 predominantly supports national policies relating to the management of natural resources. Component 3 is closely linked with component 2 and aims to support the implementation of specific adaptation and mitigation measures and technologies, particularly at local and national level. Components 4 and 5 relate to tourism and energy management in a sectoral, multi-level manner. Component 6 supports mainly education institutions (teacher training, schools, providers of non-formal training) and works closely with relevant regional organizations (USP, SPBEA). The experiences gained in component 2 and 3 will be utilized.

Component 1: Strengthening regional advisory and management capacity

Component 2: Mainstreaming climate considerations and adaptations strategies

Component 3: Implementing adaptation and mitigation measures

Component 4: Sustainable tourism and climate change

Component 5: Sustainable energy management

Component 6: Climate change and education

The Vanuatu CCCPIR program has actively been engaged in components 2, 3, 5 and 6 since 2009, and will expand its focus to cover Component 4 in January 2013.

COMPONENT 2: **Mainstreaming Climate Adaptation Considerations**

Sector ministries and national stakeholders responsible for climate have been supported by analyses, knowledge management, process and strategy advice, the provision of tools and training to develop and implement national adaptation strategies and by the integration of climate issues into sector plans and strategies. Component 2 focuses on supporting Vanuatu's national priorities in the area of mainstreaming climate change into national, local government and sectoral policies and strategies and where appropriate their integration with disaster risk reduction and biodiversity activities.

A key area of CCCPIR program support to the Vanuatu government has been the restructuring and institutional reform of national climate change governance. SPC-GIZ worked alongside government partners to create the new **National Advisory Board on Climate Change and Disaster Risk Reduction**, which is now the supreme policy making and coordination body on these issues. In addition, CCCPIR worked to design, staff and recruit members of the new **NAB Secretariat/Project Management Unit**.

In Vanuatu, the CCCPIR program has enabled mainstreaming at the national level including revision of the government's high policy document, the **Priority Action Agenda**. With CCCPIR support, an amendment was made to the **Environmental Management & Conservation Act** and its associated Regulations. In addition the program supported climate integration in the new **National Curriculum Statement**. A draft **National Climate Change Adaptation Strategy** was produced and will soon be merged into a new **Climate Change and Disaster Risk Reduction Policy** with SPC-GIZ support.

At the sectoral level, CCCPIR has completed a revision and mainstreaming of the **National Forest Policy**, and is working currently on mainstreaming climate change into the **National Livestock Framework**. CCCPIR is currently involved in the mainstreaming climate change the **Foreshore Development Act** and

the **Physical Planning Act**. As a result, a **National Land Use Planning Policy** has been developed. An **Overarching Productive Sector Policy** has been climate mainstreamed, and CCCPIR is working with the Department of Agriculture to develop a new **National Agriculture Policy**. Also currently under development with SPC-GIZ support is the **Vanuatu REDD+ Policy**.

The primary implementing agency for the Vanuatu CCCPIR program is the Vanuatu Meteorology and Geohazards Department. CCCPIR supported VMGD, the National Disaster Management Office, VARTC and the Department of Agriculture to develop **Seasonal Climate Forecasts and ENSO products with adaptation advice to farmers**. It has also developed the following manuals and guidebooks for communities: **Forest Nursery Adaptation Guidebook, Livestock Husbandry and Climate Change Manual, Solar Fruit Drying Manual, Grafting Manual, and Banana Multiplication Guidebook**.

Informed members and skilled trainers of the different sectors of the society are the basis for a sustainable change. Specific activities in Vanuatu have included **the training of departmental directors and DGs, training of journalists, GIS trainings for land sector officials, training for agriculture extension officers, training of lecturers and teachers, and practical training on CC adaptation with communities, field school with provincial area secretaries, and mainstreaming training with government sector officers**. The program has developed Vanuatu's first **Bislama-language DVD series on Climate Change** in Vanuatu including **Climate Change Overview, Climate Change & Agriculture, Climate Change & Food Security, Climate Change and Marine Resource Management, and Climate Change and MPAs** disseminated to over 30 islands and over 800 communities in Vanuatu.

In 2012, the CCCPIR program supported the launch of Vanuatu's first dedicated **Climate Change and Disaster Risk Reduction WebPortal**, www.nab.vu, which serves a national coordinating function with a project database, resource database, contact list, calendar of events, and adaptation strategy matrix. Since its launch in October 2012, the new webportal has been accessed 1137 times by 441 distinct users.

In February of 2012, the **Melanesian Spearhead Group (MSG)** invited GIZ to become a member of Environment and Climate Change Technical Advisory Committee, and design key programs in adaptation for partnerships among member countries. SPC-GIZ will provide financial resources to hire a **Climate Change Technical Expert** to be based at the MSG in Port Vila.

In November 2012, CCCPIR technically supported the Vanuatu NAB to organize a pre COP event with an aim to mobilize Vanuatu delegates to actively engage towards strong and locally beneficial agreements at the **COP18 of the UNFCCC in Doha Qatar**, and to ensure that local actors and stakeholders were able to contribute to climate change negotiations. The focus of the Vanuatu pre-COP was participatory briefing, preparation and capacity building in climate change advocacy focusing heavily on the national and regional climate change agendas, specifically the AOSIS positions on relevant topics to ensure that Vanuatu grassroots and their representatives were able to make a meaningful contribution to the negotiations for the benefit of the nation. For the first time guests from key sectors and civil society were invited to jointly produce a unified country position regarding COP 18 negotiations.

At the COP in Doha, with CCCPIR support, Vanuatu was a leading advocate for and made critical interventions on behalf of a **UNFCCC-wide Gender Equality Decision**, made inroads into youth empowerment and more fully engaged in networks of government and civil society. Most importantly, while in Doha, the Vanuatu delegation produced regular daily public briefing reports for its now wide base of supporters, and procured in return real-time advice and guidance from experts and leaders at home.

In detail, CCCPIR technically supported in 2012:

Activity	Date	Description	Beneficiaries
Radio Tok Bak Shows	7 Feb, 15 March, 23, March, 27 July, 18 Sept, 9 October, 5 December, 20 December	Radio call in shows regarding sectoral topics and climate change	Listenership of over 180,000 people
Livestock Framework Development	4-6 January 2012	Development of new Policy framework for livestock sector	Department of Livestock Staff, 8 males, 3 females
Non-Formal Education Workshop	29 Feb- 1 March 2012	Training for non-formal education providers on climate change adaptation	TVET, NGOs: 25 females, 31 males
Overarching Productive Sector Policy	6-7 March 2012	Policy development workshop and climate mainstreaming advice	22 males, 15 females
AgroMeteorology Summit	12-16 March 2012	Adaptation training for productive extension officers and climate section staff	110 males, 90 females
Meteorology Act	20 March, 16-20 April	Mainstreaming CC governance and adaptation into the draft Met Act	25 community meetings and discussions, over 500 people met
World Meteo Day	23 March	Public debates on importance of meteorology and climate change in daily lives	Public event and showcase
Gender and Climate Change Forum	9 April	Panel discussion with leading women experts and leaders	Public event showcase, 9 female speakers
LUP Guidelines Workshop	29-30 April	Technical training on LUP Guidelines for Dept of Lands and DLA officers	12 males, 3 females
CC & DRR NGO training	7-11 May	Technical training on climate change for staff and officers of local NGO's and civil society organizations	15 males, 17 females
Waste Management and Pollution Bill mainstreaming	25 May 2012	Stakeholder consultation to mainstream climate change into new draft legislation	16 males, 11 females
Fisheries and climate Change Training	5-8 June 2012	Technical training with department of fisheries staff on climate impacts and adaptation	18 males
National Environment Week	5-6 June 2012	Public awareness and debates on environment and climate change	Public event and showcase
Information, Education and Communication Technical	28 July 2012	Training and establishment of new CC IEC working group for	3 males, 9 females

Training		standardizing messages	
MSG Environment Committee Inauguration	24-25 July 2012	Support workshop to MSG to incorporate climate change into MSG core function	14 males, 9 females
Vanuatu Agriculture Show	26 July 2012	Climate change booths, demonstrations and awareness	Public event and showcase
NAB Portal Training	9-10 August 2012	Training of key organizational contacts on the function and use of the NAB portal	20 males, 13 females
Fishermen's Association Climate Change Training	13 August 2012	Training for fishermen on how to develop adaptation strategies in their sector	18 males
Agriculture Cluster Establishment	10 Sept 2012	Training and establishment of new Agriculture coordination cluster for climate change and disaster risk reduction projects	9 males, 8 females
Climate Change Coordinators Training	17-20 September 2012	Technical training on key climate adaptation concepts and experiences for USP CC coordinators and project managers	13 males, 11 females
SimClim and Climate Futures Training	1 October 2012	Technical training on climate projects, forecasting and use of computer for NGOs and government officers	20 males, 9 females
National Disaster Week	8-13 October 2012	Climate change booths, demonstrations and awareness	Public event and showcase
Futuna Island Traditional Knowledge Collections	20-27 October 2012	Collection of traditional knowledge and indicators of climate change	6 villages, discussions with over 200 people
Climate Change and Water Resource Management Lessons Learned Training	22 October 2012	Collaboration with IWRM to write lessons learned in regards to past projects	11 males, 10 females
Climate Change Mainstreaming Training	23 October 2012	Technical training for Sanma provincial staff on how to mainstream CC & DRR into daily work planning	27 males, 18 females
National CC & DRR Policy Consultations	23-24 October 2012	Consultations with chiefs, NGOs, women, disables and technical extension officers on key policy directives	30 males, 25 females
ACP Climate Change Forum	31 October 2012	Training for project managers, government officers and CROP agencies on adaptation lessons learned	28 males, 26 females
Tanna Island Traditional Knowledge Collections	15-20 November 2012	Collection of traditional knowledge and indicators of	11 villages, discussions with over

		climate change	650 people
Pre COP 18 discussion and policy forum	17 November 2012	Multi-stakeholder meeting to define key Vanuatu climate change priorities for international negotiations	12 males, 9 females

COMPONENT 3: Implementing Adaptation and Mitigation Measures

In 2012, the CCCPIR program has supported government and civil society actors responsible for climate change and adaptation in designing and carrying out suitable adaptation and mitigation activities based on gender-specific surveys, undertaking demonstration and pilot measures, conducting training courses and providing advice and support on reviewing experiences. Advisers have supported communities in the participatory planning, implementation and reviewing of adaptation experiences.

In Vanuatu, Component 3 focuses on the implementation of adaptation and mitigation measures, particularly at the community level.

Implementing model projects on climate change adaptation on pilot sites has been of crucial importance in order to gather experiences on the ground and feed them back into the national strategic and policy development processes and create success stories of concrete adaptation measures.

Pilot site activities have continued in the two sites selected in 2010 through an intensive consultation process:

Pele Island, susceptible to the climate change impacts of sea level rise, coastal inundation, rainfall variability, soil nutrient loss, and coastal & hillside erosion.

Teouma Community, Efate Island, susceptible to climate change impacts of rainfall variability, soil nutrient loss, high wind exposure, and excessive temperatures.

Adaptation options for field trials were developed by government technical experts reflecting national priorities and building on the results of **detailed Vulnerability and Adaptation Assessments** carried out in the pilot sites. To further highlight adaptation options, the program worked alongside the Department of Agriculture and Rural Development and five other national partners to develop **an add on Agricultural and Climate Change Assessment** to the V&A methodology and develop a **Farming as a Business** training module for the VNTC. .

Demonstration activities being trialed and evaluated for up scaling in the Pilot Sites include **Coastal & Hillside Erosion Control Measures through Forestry, Soil Enhancement & Composting, Crop Diversity Trails for Climate Resilience, Adapted Farming System designs for CC Resilience, Livestock Breeding Trials for CC Resilience, Integrated Agriculture & Livestock System, Crown of Thorns Starfish Composting, Marine Resource Management, Solar Fruit Drying and Food Preservation, Silage livestock Feed technologies, Citrus Grafting technologies, Banana and Yam multiplication technologies, Composting Toilet technology, Tilapia Backyard Urban Food Security, Honey Bee Husbandry enhancement, Livestock Biogas technology**

See also two **webdocumentaries** produced in 2012:

1. <http://webdocs.dw.de/vanuatu/english>
2. http://tvdownload.dw.de/Events/mp4/globalideas_en/globalideas_en20120806_vanuatu_sd.mp4

The Vanuatu CCCPIR places a strong emphasis on partnerships and collaborations; specifically finding ways to value add on adaptation projects through multi-partner implementation. In this regard, CCCPIR has initiated several unique partnerships for climate change adaptation:

1. Joint initiative among the European Union, University of the South Pacific, the Nguna-Pele Marine and Land Protected Area Network and the SPC-GIZ CCCPIR program on **ridge to reef community-based adaptation** implemented (16 communities on North Efate)
2. Joint CC Consortium multisectoral **community-based adaptation** program in implementation among SPC-GIZ, Oxfam, Care, Red Cross, VRDTCA (28 communities in Tanna and Torba Province)
3. Joint Initiative on CC and **water resources adaptation** among SPC-GIZ, SPC-SOPAC IWRM and Sanma Provincial Government (6 communities in Sarakata Watershed).
4. Joint Initiative on **Climate Variability education and animations** among GIZ, BoM Australia, CSIRO, Red Cross and Vanuatu Government

COMPONENT 5: Sustainable Energy Management

CCCPIR launched its sustainable energy management activities in Vanuatu in 2012, and have agreed with stakeholders (Department of Energy, Mines and Mineral Resources and Vanuatu Meteorology and Geohazard Department) on the following priorities:

- Support to the development of the Vanuatu energy road map;
- Support development of a data management system and energy database;
- Carry out studies for energy efficiency in Government buildings; and
- Carry out activities to raise awareness of financing for renewable energy and energy efficiency.

Support has been given in the development of the Vanuatu energy road map and also government building energy efficiency. The Government of Vanuatu (GoV) expressed an interest in pursuing energy efficiency improvements through the Asian Development Bank (ADB) with technical assistance in sustainable energy management from the SPC-GIZ CCCPIR Program. ADB PEEP2 and SPC-GIZ CCCPIR agreed to collaborate to produce several preliminary energy audit reports in Vanuatu with the purpose of assisting the stakeholders to move forward with the investment required to reduce energy consumption and, where appropriate, implement renewable energy investments to reduce electricity consumption from the grid, and therefore fossil fuel consumption and CO₂ emissions.

A preliminary, or walk-through, energy audit was conducted on 19th July 2012 at the Vanuatu Meteorology and Geo-Hazards Department (VMGD) within the Ministry of Infrastructure and Public Utilities (MIPU) in Port Vila, Vanuatu. This **VMGD Energy Audit Report** identifies investment opportunities in energy efficiency (and renewable energy where appropriate) in government buildings in Vanuatu.

An estimated energy balance was prepared, which found that the major energy end-use systems in the VMGD building are lighting, air-conditioning and IT equipment. There are energy saving options regarding air-conditioning and some lighting options including retrofitting the whole building with T5 fluorescent tube lamps (FTLs), or existing luminaries with Energy Efficient (EE) luminaries with T5 FTLs. Several options were also provided (including costs) in regards to the installation of a photovoltaic system to generate electricity.

COMPONENT 6: Climate Change Education

Vanuatu decided to introduce basic concepts of climate change in curriculum review process. The process to introduce relevant elements into national teacher training programs has commenced. National training institutions for primary and secondary teachers and vocational training have been advised on the integration of climate change into policies strategies, curricula and assessment standards, taking the activities on Education for Sustainable Development into account. These institutions have been supported to develop and offer corresponding trainings and supporting material. USP has been supported to play a central role in the training of trainers for the national institutions.

In Vanuatu, the CCCPIR education component has organized several major climate change and curriculum workshops with the curriculum writers for both senior and primary levels. The writers were able to think through the various subjects and learning areas, and identify ways by which climate change could be incorporated into existing and new syllabi. CCCPIR technically supported training for primary and secondary school teachers on how to improve science skills (including climate change) among students. With CCCPIR support, the Vanuatu National Training Council (VNTC) has now included competencies on climate change and disaster risk management in their qualification framework.

A Training Module on climate change and disaster risk reduction was developed in partnership with SPC's Center for Education, Training and Communication. In addition, several children's books in the Pou and Miri series were developed by the CCCPIR region component and disseminated to area schools and kindergartens.

Activity	Date	Description	Beneficiaries
Non-Formal Education Workshop	29 Feb- 1 March 2012	Training for non-formal education providers on climate change adaptation	TVET, NGOs: 25 females, 31 males
TVET Training Workshop and Planning Meeting	30 August 2012	Training for TVET trainers and curriculum writers on incorporating climate change into non-formal subjects	27 males, 21 females
Curriculum Writers Workshop	9-11 October 2012	Training and writing workshop for curriculum writers to mainstream climate change into specific subjects	16 males, 19 females
Climate Zone Quiz Show for TV	16 November 2012 , 15 December 2012	Televised climate change game show with Vanuatu secondary school students	8 Vanuatu secondary schools, 55 males, 42 females

Governance of the CCCPIR in Vanuatu

CCCPIR Vanuatu has been heavily engaged in supporting Vanuatu to improve and strengthen the governance of climate change projects and program at a national level. At present, the CCCPIR program is broadly governed under the CCCPIR supported National Advisory Board on Climate Change and Disaster Risk Reduction, under the oversight of Co-Chairs Jotham Napat and Shedrack Weleghabit. Operational decisions are taken in consultation with relevant Department Heads, departmental technical staff, and officers of the NAB Secretariat/PMU according to the nature of the project or activity.

In February 2012 a Climate Change Planning workshop was held with local stakeholders to define priorities for the Vanuatu government under the CCCPIR program. The resulting **Vanuatu Climate Plan of Operations** is a living document which any government agency or development partners may refer to as a guide for local program priorities on climate change adaptation.

DSPPAC Budget Breakdowns 2012

	Budget line	Planned (Vatu)	Realized (Vatu)
1	Technical expertise: long term and short term advisory services	34,600,000	28,900,000
2	Equipment	1,400,000	1,400,000
3	Training and Workshops	4,400,000	4,290,000
4	Pilot site activities	5,800,000	4,500,000
	Total	46,200,000	39,090,000

New Revised SPC-GIZ CCCPIR Program Budget 2009-2012

Donor Aid In Kind (vatu)

Items	1 st Year 2009	2 nd Year 2010	3 rd Year 2011	4 th Year 2012	5-7 th Year	Total
Equipment		4,400,000	1,400,000	5,493,906	3,000,000	14,293,906
Trainings/Workshops	1,400,000	2,750,000	4,290,000	9,496,739	9,300,000	27,236,739
Technical Expertise	3,900,000	31,000,000	28,900,000	29,988,500	30,000,000	123,788,500
Pilot Site Activities		2,850,000	4,500,000	7,213,119	10,700,000	25,263,119
Total	5,300,000	41,000,000	39,090,000	52,192,264	53,000,000	190,582,264

As outlined in the GIZ-Vanuatu MOU, the German Government through GIZ is providing Technical Assistance in different forms to the project (long term and short term expertise, equipment, training, financial support for pilot projects, communication etc.). The equivalent amount to provide these services can be estimated at up to 190,582,264 Vatu. Note**: The amounts provided below are approximations only, and can be reallocated between the different items according to the implementation needs.