



Vanuatu: Roads to prosperity

The Pacific island nation of Vanuatu was one of the first countries selected for an MCC compact. It was deemed compact eligible in 2004 based on its strong performance on MCC's selection criteria. Upon its selection as an MCC eligible country, the Government of Vanuatu quickly mobilized to review the country's most binding constraints to growth. As a small, open, island economy, agriculture and tourism are central to Vanuatu's growth. However, under-developed, substandard, and poorly maintained transportation infrastructure was identified as a critical constraint to formal economic activity and private sector investment in the agriculture and tourism sectors.

MCC and the Government of Vanuatu initiated a comprehensive consultative process consisting of public forums and meetings with the council of chiefs, women's group leaders, the private sector, donor partners, NGOs, church leaders, and government officials from Vanuatu's provinces. As a result of these consultations, the Government of Vanuatu chose to target their proposal toward improving the country's transportation infrastructure. Additional analyses were completed to determine which proposed investments would yield the greatest income increases and economic returns. In March 2006, the Government of Vanuatu and MCC agreed on a package of investments focusing on upgrading the country's transportation infrastructure and strengthening the Vanuatu Public Works Department.

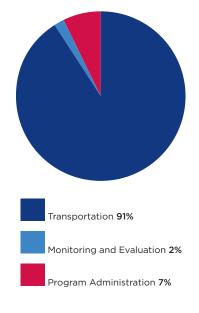
The five-year, \$65.69 million MCC Compact aimed to reduce poverty and stimulate economic growth by developing up to eleven infrastructure projects, including roads, wharves, bridges, creek crossings, warehouses, and an airstrip, all designed to help poor, rural agricultural producers and providers of tourist-related goods and services through reducing transportation costs and improving access to transportation services. In addition, the program included initiatives to strengthen institutions and enact policy reforms to ensure sustainable operation and maintenance of Vanuatu's transport infrastructure network.

The compact was formally restructured in early 2008 due to escalating global construction costs, currency fluctuations, and other considerations. The construction and tar sealing of the two most important national roads, the Efate Ring Road (92.5 kilometers) and the

Vanuatu Compact at a Glance Signed March 2, 2006

Entry into Force... April 28, 2006

Compact Total \$65,690,000



To learn more about results of MCC's investments in Vanuatu, visit <u>www.mcc.gov/vanuatu</u>

Santo East Coast Road (57.2 kilometers), became the focus of the restructured compact after an extensive review process led by MCA-Vanuatu, the Government of Vanuatu and MCC.

Key achievements

- ★ The rehabilitation and sealing of 149.7 kilometers of roads were completed five months ahead of schedule and on budget (relative to targets established in the 2008 re-scoping).
- ★ Completion of road rehabilitation is inclusive of 30 percent additional contracted works, including extended and widened sealed sections and enhanced road safety and sustainability measures.
- ★ The number of beneficiaries within a five-kilometer catchment area of either side of the MCC-funded roads is projected to be 39,203 over the 20-year life of the MCC investment; 16,564 beneficiaries are located on Efate and 22,639 beneficiaries are located on Santo.
- ★ Over 39,000 people, 62 percent and 49 percent of the populations in Santo and Efate, respectively, are benefitting from the rehabilitation of these roads. This translates to an estimated income gain of U.S. \$73.8 million over 20 years.
- ★ In the first year of the compact, the Government of Vanuatu increased road maintenance funds by approximately U.S. \$5 million in compliance with a compact requirement. In 2011, the Government of Vanuatu further increased its commitment by approximately U.S. \$5.5 million.
- ★ As part of the Institutional Strengthening Activity, seven officers were hired for the new Engineering Support Unit (ESU) within the Vanuatu Public Works Department (PWD). These officers were trained in project and contract management, road maintenance, and environmental and social safeguards and are now permanent public servants within PWD helping to ensure the sustainability of MCC's investment. U.S. \$1,048,648 in plant and maintenance equipment was procured for PWD and together with additional vehicles is currently employed in routine maintenance activities. The Government of Vanuatu has utilized a further U.S. \$50,000 from quarry royalty income on additional road maintenance materials and training in road asset management.
- ★ According to traffic counts from July 2011, the Efate Ring Road and Santo East Coast Road have exceeded the end-of-compact targeted increase in daily traffic by 311 percent and 154 percent, respectively, directly benefiting an estimated 28,268 people (based on the 2009 census) and 622 formal and informal roadside businesses (based on the 2011 Roadside Enterprise Survey.
- ★ The average travel time has been reduced by up to 50 percent on Efate Island and up to 75 percent on Santo Island. Prior to the MCC compact, for example, travel time from Luganville to Port Olry on Santo Island was three hours; today, on the new roads, travel time is 45 minutes.
- ★ The number of days per year that the Efate Ring Road is impassable has dropped from nine in 2006 to zero in 2011. The new roads have withstood earthquakes, cyclones, and heavy rains, important tests given the frequency of natural disasters.
- ★ Preliminary economic analysis of the Efate Ring Road and the Santo East Coast Road projects estimate that sealed road improvements will generate U.S. \$6 million in savings in vehicle operating costs in the first year following the completion of the road works.¹

¹ Economic analysis conducted using Highway Development and Management software (HDM-4), an internationally recognized software tool for conducting project appraisals of road management and investment alternatives

★ The poverty rate in a) Rural Efate has decreased from the 37.7 percent baseline in the Monitoring and Evaluation Plan to 19.1 percent (against the Rural Efate end-of-compact target of 31.2 percent) and b) East Coast Santo has decreased from 14.6 percent to 5.2 percent (against the East Coast Santo end-of-compact target of 7.3 percent). These poverty rates represent the proportion of the population in households with per capita income below the Basic Needs Poverty Line. (Source: "Household Income and Expenditure Survey 2010 Poverty Analysis; Monitoring Progress Towards Achieving Income and Poverty Targets in the Transport Sector for Rural Efate and East Coast Santo", prepared by MCA-Vanuatu Poverty Consultant, September 4, 2011)

MCC Principles into Practice

Policy Performance

The Government of Vanuatu has been proactive in using MCC's eligibility criteria to guide policy reform. The Department of Strategic Policy Planning and Aid Coordination has integrated the MCC eligibility criteria into national and institutional planning and the Annual Development Report, and has already seen successes: In 2010 the Government made a substantial increase in efforts and resources directed towards immunizing children against polio, measles, tetanus, tuberculosis, and whooping cough; the implementation of the Free School Policy at the basic education level (years 1-8); the establishment of a Utility Regulatory Authority to protect consumers and implement a long-term land reform program; and the establishment of a Law Reform Commission and Human Rights Commission.

In addition, Vanuatu's Public Roads Act, the current mechanism in place regulating road maintenance, is in the process of being replaced to reflect the impact of MCC-funded sealed roads, to better protect these roads, and to provide for penalties for damage to the roads. The new Public Roads Act will be accompanied by drainage and building codes and supporting regulations. Numerous pieces of legislation are affected by the creation of a new Public Roads Act; such legislation includes the Road Traffic Control Act (with a focus on road safety), Land Reform Act, Land Acquisition Act, Environmental Management and Conservation Act, Land Surveyors Regulations, Physical Planning Act, and Chapter 25 regarding public roads of the Laws of Vanuatu. The new Public Roads bill is expected to be presented to Parliament for approval by the end of 2011.

The Government of Vanuatu has stated its plans to continue these efforts in 2011 and 2012 through focused reforms addressing budget increases in education, health, justice, legal sector, trade and other institutions that deal with promotion and foreign direct investment. Furthermore, the Government of Vanuatu has stated its intention to continue the introduction of additional legislative reforms and streamlining of processes in the areas of business start-up, regulatory quality, trade policy, education, health, state-owned enterprise, and deregulation of monopolies.

The Vanuatu Compact was characterized by a whole-of-government commitment and significant capacity-building in results-based management. Despite financial and human resource constraints, the Government of Vanuatu has demonstrated a commitment to leadership in the Pacific region by engaging in good governance, sound economic policy, and continued investment in their citizens.

Transport Infrastructure Project

Project Description

The Transport Infrastructure Project included \$58.3 million in strategic investments focused on reducing poverty and stimulating economic growth through the rehabilitation and upgrading of two national roads on two different islands. This is helping poor, rural agricultural producers and providers of tourist-related goods and services through reduced transportation costs and improved access to transportation services. In addition, the project included \$1.8 million focused on institutional strengthening and policy reform initiatives to ensure the sustainable operation and maintenance of Vanuatu's transport infrastructure network.

Outcome

- ★ Rehabilitate 92.5 kilometers of the Efate Ring Road and 57.2 kilometers of the Santo East Coast Road.
- ★ The estimated beneficiary income gain associated with the Vanuatu Transport Infrastructure Project is equivalent to \$73.8 million over the 20-year life of the MCC investment based on constant 2008 U.S. dollars.
- ★ The number of beneficiaries within a five-kilometer catchment area of either side of the MCC-funded roads is projected to be 39,203 over the 20-year life of the MCC investment; 16,564 beneficiaries are located in Efate and 22,639 beneficiaries are located in Santo.

Results to Date

- ★ 149.7 kilometers of road rehabiliation completed (100 percent of 2008 re-scoped project targets).
- ★ Fully upgraded the Efate Ring Road and the Santo East Coast Road from a 4.0 meter one-lane unsealed coral surface to a 6.0 meter two-lane bitumen sealed carriageway with 1.0 meter shoulders including all required drainage systems, road furniture, markings and signage.
- ★ As of the September 2010 traffic counts, the Efate Ring Road and Santo East Coast Road have exceeded the end-of-compact targeted increase in daily traffic by 311 percent and 154 percent, respectively, directly benefiting an estimated 28,268 people (based on 2009 census) and 622 formal and informal roadside businesses (based on the 2011 Roadside Enterprise Survey).
- ★ Preliminary estimates show that average travel time have been reduced by up to 50 percent on Efate Island and up to 75 percent on Santo Island. Prior to the MCC compact, for example, travel time from Luganville to Port Olry on Santo Island was three hours; today, on the new roads, travel time is 45 minutes.
- ★ The average travel time has been reduced by up to 50 percent on Efate Island and up to 75 percent on Santo Island. Prior to the MCC compact, for example, travel time from Luganville to Port Olry on Santo Island was three hours; today, on the new roads, travel time is 45 minutes.
- ★ The poverty rate in Rural Efate has decreased from the 37.7 percent baseline in the Monitoring and Evaluation Plan to 19.1 percent (against the Rural Efate end-of-compact target of 31.2 percent) and

East Coast Santo has decreased from 14.6 percent to 5.2 percent (against the East Coast Santo end-of-compact target of 7.3 percent). These poverty rates represent the proportion of the population in households with per capita income below the Basic Needs Poverty Line. (Source: "Household Income and Expenditure Survey 2010 Poverty Analysis; Monitoring Progress Towards Achieving Income and Poverty Targets in the Transport Sector for Rural Efate and East Coast Santo", prepared by Kim Robertson, MCA-Vanuatu Poverty Consultant, September 4, 2011)

Institutional strengthening and policy reform within Vanuatu Public Works Department

Results to Date

- ★ \$1,048,648 in plant and maintenance equipment procured and in use by PWD on the roads.
- ★ Four PWD Efate Ring Road maintenance crew members and five Santo East Coast Road maintenance crew members were trained in sealed road maintenance procedures and use of equipment.
- ★ From June 2008 to September 2010, the roads contractor hired and trained 167 full time ni-Vanuatu workers. PWD can draw on this local pool of experienced skilled and semi-skilled labor to support future PWD manpower requirements.
- ★ Seven trained Engineering Support Unit employees were hired as PWD permanent full-time staff.
- ★ In 2011, in order to further ensure the sustainability of the compact-funded roads, the Government of Vanuatu increased their National Road Maintenance Budget commitment from \$5 million to \$5.5 million.
- ★ A new Public Roads Act is currently being drafted that defines the authorization of construction, maintenance and other matters related to public roads. It is expected to be presented to Parliament for approval in late 2011.

More results to come

The result MCC is most interested in seeing is increased incomes associated with MCC investments. The results described above are important steps toward this, but MCC uses impact evaluations to assess the full extent of impacts that can be attributed to MCC programs.

Evaluation Summary

Major Question: What is the impact of national rural road improvements on accessibility and income for affected households and businesses in Vanuatu?

Basic Description: This evaluation uses a rigorous method that includes two types of quantitative analyses to compare the impact of various roads on household incomes in communities located near the roads with a group of similar communities distant from the roads.

Methodology: The evaluation will compare the impact of the rehabilitated national roads network on household incomes and business revenues in communities located within 5 kilometers of the roads with a group of similar communities that are distant from the rehabilitated roads. The evaluation will help MCC further estimate the economic benefits derived from benefits brought by the road project, such as reductions in travel time, increased mobility, increased access to social services, reductions in public transport service fees, increased tourism expenditure, increased agricultural output, and increased land values and use.

Expected Date of Completion of Post Compact Evaluation: April 2013. In addition, findings from the planned 2012 Roadside Enterprise Survey, expected in August 2013 will provide information about new informal and formal sector businesses operating along the road since its construction.

Insight into Implementation

★ Strong Partnerships Overcome Obstacles: The MCC compact with the Government of Vanuatu aimed to reduce poverty and stimulate economic growth by targeting the country's poor transportation infrastructure, initially planned through the completion of 11 different infrastructure sub-projects on eight islands. In late 2007, the original bids received for the design and build of all sub-projects came in at approximately three times the project budget due to rising construction costs, changes in currency exchange rates, and delays in mobilizing implementing entities and contractors. This limited MCA-Vanuatu's ability to implement the project within its allocated budget and timeline.

Consequently, a re-scoping of the project was led by MCA-Vanuatu, the Government of Vanuatu and MCC. The proposal for project modification focused on the construction and sealing of the high-priority national roads, the Efate Ring Road and portions of the Santo East Coast Road. In June of 2009, the Government of Vanuatu signed a funding agreement with the New Zealand Aid Program to provide NZ \$14 million (equivalent to \$9 million) in additional funding support, which contributed to completing the construction and sealing of both the roads. The continued commitment and partner-ship resulted in all major construction of the re-scoped project completed five months ahead of the compact end date..

★ Resources Levels Committed to Match the Program: As one of the first MCC compacts, the Vanuatu program had to overcome constraints caused by underestimation of the resources and capacity needed to successfully administer, implement, and report on a development and infrastructure program. Country ownership and country-led implementation require sophisticated capacity, particularly where large infrastructure projects and international contracts compliant with international standards are involved. In small island nations such as Vanuatu, resources with the qualifications and experience to manage these results can be limited. Just one month passed from compact signing to the time of compact entry in force, starting the five-year clock. It took the better part of a year to get the necessary systems and structures in place to effectively manage the program.

Even with this delayed start, the lean but dedicated staff was able to implement the re-scoped program ahead of schedule and under budget. MCC has taken this as a lesson learned, and now devotes more time to building up key implementation structures, including staffing of the accountable entity and project planning before the compact enters into force. MCC has developed customized capacity development materials, and MCC's country teams provide extensive training support.

★ A Partnership Spanning Decades: The core of the two roads rehabilitated by MCA-Vanuatu were originally built by U.S. troops during World War II, when the country was host to the largest U.S.

military base in the South Pacific. Indigenous ni-Vanuatu who worked alongside the troops were justly proud of their joint achievements, and many went on to extend the roads after the troops left.

The U.S. Navy's Pacific Partnership paid a visit to the country in Spring 2011 as part of a mission to sustain the valued partnership between the United States and Vanuatu. Together with the Vanuatu Police Force, Mobile Force and Maritime Forces, and New Zealand, Australian and French partners, the mission was based on the island of Santo and constructed schoolhouses and clinics and undertook medical and veterinary projects. Many of these activities were along the Santo East Coast Road and were enabled by the new Santo East Coast Road. The U.S. Navy visit provided an opportunity for Navy Admirals to see the newly constructed roads, originally built by Americans and now rehabilitated by the people of Vanuatu with support from the United States..

Sustainability of Impacts

Country Ownership and Sustainability

- ★ In the final year of the compact, MCA-Vanuatu and the Government of Vanuatu determined that the Public Works Department still needed significant improvements in road maintenance planning, management, execution, and reporting. Prior to the transfer of management of the new roads to PWD, MCA-Vanuatu hired a Road Asset Maintenance Manager to work directly with the PWD to bolster capacity in the aforementioned critical areas. This additional management will help ensure that the national road network is maintained and the investments of the project are sustained. Although the engagement of such technical assistance was a late addition to the project, it has proven to be one of the most important and successful elements. The Government of Vanuatu has used its quarry royalty income to fund a return visit by the Road Asset Maintenance Manager's company to provide a weeklong workshop for 15 PWD officers in September 2011. Future integration of this type of assistance at an early stage in the compact will help accountable entities and partner governments ensure continued sustainability of the projects.
- ★ In the first year of the compact, the Government of Vanuatu moved to increase annual road maintenance funds by approximately \$5 million in compliance with a compact requirement. In 2011, the Government of Vanuatu further increased its commitment by approximately \$5.5 million. A major restructuring of PWD, with a strong focus on long-term human resource needs, is expected to underpin further increased resourcing to PWD and for road maintenance in 2012. This commitment in funds is enabling the PWD to develop long-term plans and build capacity to ensure the sustainability of the MCC-funded roads.
- ★ In 2008, the Engineering Support Unit was established by the PWD to provide dedicated oversight on the roads financed by MCC. This unit has been instrumental to the success of the program, and has assumed oversight responsibility for the road projects during the final stages of the design-and-build contract. This unit has been fully integrated into PWD, ensuring that the capacity built in project management and environmental and social practices will be maintained locally and in a sustainable manner.

As of March 2011, community-based routine maintenance contracts had been issued to local communities along 52.9 kilometres of the Efate Ring Road (57 percent) and 14.4 kilometers of the Santo East Coast Road (27 percent). These contracts provide for community-based routine maintenance on a defined section of road to assist in ensuring the upkeep and long-term sustainability of the roads. The

Public Works Department's approved 2011 Business Plan commits \$1.6 million for community-based routine maintenance contracts for the 1,800 kilometres of the nation-wide roads network. Community contracts represent a potential increase in household income for the 5,931 beneficiary households within the MCC-funded roads catchment areas; 2,506 of these households are located in Efate and 3,425 of these households are located in Santo.

★ Effective August 26, 2011, the Government of Vanuatu established the Vanuatu National Project Management Unit (VPMU) utilizing the core management, financial and technical capacities developed under MCA-Vanuatu. The VPMU has a longer-term goal of providing high-level project leadership and contracts management expertise to selected national projects and ministries.

Success story

Earnest Kalkoa has been operating his small World War II museum for over ten years and has been struggling to maintain his business. Between the museum's rural location and poor road conditions, efforts to increase revenue have been difficult. In 2010, Earnest's dream to expand his business and increase his revenue came true after the Efate Ring Road, which passes by his museum, was rehabilitated.

Other business owners like Earnest report that improved road conditions have led to an expansion in guided bus tours for travelers, boosting revenues for both tour operators and businesses. With improved access to commercial centers, resort owners use the improved roads to stock their hotels and restaurants. A recent tourism survey in Vanuatu underscores the importance of the sector to the economy, and reveals very promising trends. For example:



- ★ Tourism in Vanuatu has increased by an average nine percent per year since 2006. This compares favorably with an average increase of less than three percent worldwide during the same period.
- ★ Direct value added to local incomes derived from tourism expenditures increased by 24 percent from 2006 to 2010 (from \$108 million to \$133 million).

*MCC has an impact evaluation and other studies planned which will assess the degree to which MCC's road investments are contributing to these income gains and new business activity.



Before, parts of the Efate Ring Road was narrow and encroached by vegetation. The rehabilitated roads now allow for cars to pass each other with no problem.