

RISK MANAGEMENT, ECONOMIC SUSTAINABILITY AND ACTUARIAL SCIENCE IN INDONESIA (READI)

MIDYEAR REPORT NUMBER 1

APRIL 1, 2016 TO SEPTEMBER 30, 2016

Project Information		
Project Number	D-001598	
GAC Financial Contribution	\$15,178,615	
Manulife Indonesia Contribution	\$1,000,000	
CIMB Sun life Contribution	\$500,000	
Start and End Date of Activities	September 8, 2015 / October 3, 2020	
Contact Information	Jean Lowry, Project Director Waterloo, Ontario (519) 888-4567 ext 30493 jean.lowry@uwaterloo.ca	Bill Duggan, Field Director Jakarta, Indonesia 0813 8641 2117 bill.duggan@uwaterloo.ca

Contents

Executive Summary..... iv
 Description iv
 Operations iv
 Outcomes achieved iv
1.0 Project Description and Context 1
 1.1 Project Summary..... 1
 1.1 Project Rationale..... 2
2.0 Operations 2
 2.1 Implementation 2
 2.2 Management Issues and Adjustments..... 8
 2.2.1 Managing for Results 9
 2.2.2 Risk Management 9
 2.2.3 Monitoring and Management of Crosscutting Themes..... 9
 2.2.4 Management of Day to Day Operations 10
 2.3 Financial reports 10
3.0 Outcomes 10
Appendix A: Performance Measurement Framework (PMF) 11
Appendix B: Annual Work Plan 22
Appendix C: Risk Register..... 29

Executive Summary

Description

The READI project's objective is to establish Indonesia as a regional centre of actuarial excellence by working with high schools and universities, the insurance and pensions industry, Indonesia's professional actuarial association, and government agencies – to increase the number and quality of Indonesian actuarial science graduates available to Indonesian business, universities and government agencies, and to strengthen the actuarial profession in Indonesia. It supports Canada's foreign policy priority of promoting prosperity in Southeast Asia and aligns with Canada's Global Markets Action Plan, in which Indonesia is a priority.

Operations

Project approval was provided by DFATD in March 2015 but for technical and logistical reasons, the Inception Mission for READI was delayed until January 2016 with DFATD approval. The Contribution Agreement was concluded between DFATD and the University of Waterloo on 8 September 2015, thus allowing for the delivery of advance action activities prior to the Inception Mission (IM) and resulting Project Implementation Plan (PIP), and the first annual work plan and accompanying budget. The hiring and mobilization of the Canadian and Indonesian staff took longer than anticipated, resulting in several missed targets for activities on the project. Mitigation measures have been put in place as of the end of Q2 and, at this time of writing, there are only two activities that are still considered at risk and which require further investigation to identify appropriate mitigation measures. These are described below:

- Although there is interest in the **scholarship program (1123.2)**, the uptake of the scholarships for the one year Master's program has to date been low. As of the end of Q2, it was recognized that achievement of the project goal of 19 Master's degrees was at risk. The reasons for the low uptake by prospective students includes: concern about a disruption to family life and the possibility that the scholarship award is too small to be viable. There also appears to be a lack of incentive to acquire a second Masters. Further investigation is required, and TORs have been prepared as of Q3 to hire a consultant to undertake a review of the situation to allow for mitigation measures to be put in place in Q4.
- The delay in staffing may affect achieving **5000 actuarial science credits (1131.3)**. Work will begin in Q4 to identify measures that will allow for fast tracking of program testing and delivery.

Outcomes achieved

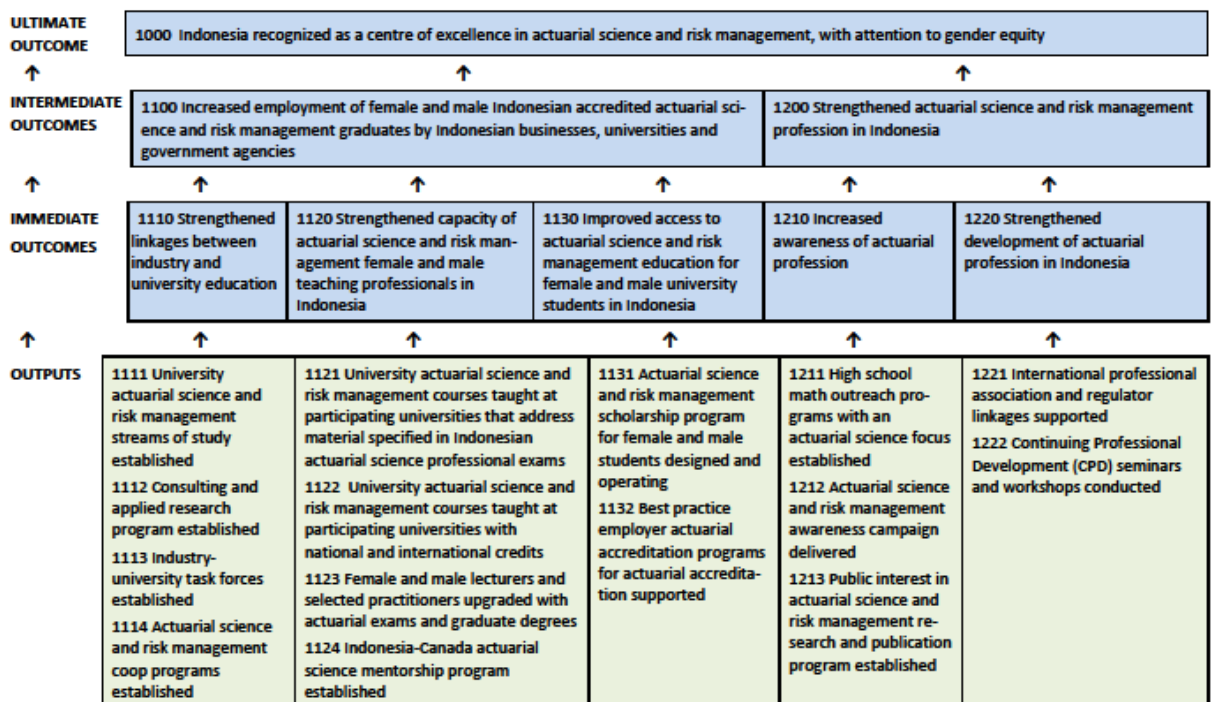
As this is the first mid-year report, it is too early to see outcomes. At the same time, the team remains confident that intermediate outcome targets are plausible. The project is gaining momentum and delays, early on, are being addressed. Systems are in development to allow tracking of cumulative results as they emerge.

1.0 Project Description and Context

1.1 Project Summary

The project’s objective is to establish Indonesia as a regional centre of actuarial excellence by working with high schools and universities, the insurance and pensions industry, Indonesia’s professional actuarial association, and government agencies – to increase the number and quality of Indonesian actuarial science graduates available to Indonesian business, universities and government agencies, and to strengthen the actuarial profession in Indonesia. It will support Canada’s foreign policy priority of promoting prosperity in Southeast Asia and aligns with Canada’s Global Markets Action Plan, in which Indonesia is a priority. A copy of the Project Logic Model is included in this section and the Performance Measurement Framework is included in Appendix A.

Logic model (LM) – Project Outcomes and Outputs



1.1 Project Rationale

The project addresses a critical and focused development need – filling a key human resources gap and addressing a significant risk to economic stability and growth for Indonesia. Financial crises over the past two decades have highlighted the importance of a stable and trusted financial industry. Individual Indonesians, particularly those with limited means, rely on health, life and other insurance in times of crisis and need. The insurance market in Indonesia is growing consistently, by 8% in 2013 and about 15-20% in 2014, resulting in an increased demand for actuaries. Indonesia presently faces a shortage of accredited actuaries, threatening the growth of the insurance and pension industry and presenting a risk to economic stability and growth for Indonesia.

Actuaries provide a foundation for risk assessment and assurance underpinning sound business practice similar to financial auditors. Risk based regulation of the insurance and pensions industry, adopted by Indonesia following Canada's lead, requires the professional understanding and oversight provided by accredited actuaries.

Understanding of and expertise in risk management and actuarial science is also important for public sector financial and management capacity, particularly at the national and regional levels. Access to more and better actuarial science graduates by government and business will improve transparency and security in management of public finances (e.g. pension and health insurance systems) and improve the trade and investment climate in Indonesia. Indonesia has enacted laws to provide appropriate oversight of the finance industry by trained actuaries but there is a very large gap between supply and demand for these highly educated and skilled people.

Project activities are designed to enhance the capacity of educational institutions to meet clearly identified labour market demands and engage the private sector in providing students with appropriate, meaningful and structured workplace learning opportunities through to employment. More Indonesian actuarial science graduates with strengthened education acquired in Indonesia will support business growth, market expansion and productivity. Understanding of and expertise in risk management and actuarial science is also important for public sector financial and management capacity including oversight and regulation, particularly at the national and regional levels. Access to more and better actuarial science graduates by government and business will improve transparency and security in management of public finances (e.g. pension and health insurance systems) and improve the trade and investment climate in Indonesia. Project activities are also aligned with current Government of Indonesia development priorities.

2.0 Operations

2.1 Implementation

The Annual Workplan for Fiscal Year 2016/2017, as presented in the PIP is presented in Appendix B. Initially the project was planned based on a calendar year and the AWP represents that approach. Subsequently, the project reporting was changed to reflect the usual Fiscal Year cycle. In this Midyear

report, coinciding as it does with the transition, the information presented represents a combination of the two. Future reports are to be presented only on a fiscal year basis.

This Midyear report compares the actual activities, sub activities and outputs with what was anticipated for the first semester in the annual work plan. The differences between the two are presented in Appendix B. A summary of the results of activities identified in the Annual Workplan is presented below.

Outcomes, Outputs and Activities	Description	Progress at Midyear
Immediate Outcome 1110 Strengthened linkages between industry and university education		
1111 University actuarial science and risk management streams of study established		
Activity 1111.1 Curriculum Review	Detailed analysis to accurately identify and map courses, course content, supporting materials, levels of teaching and assessment and faculty qualifications to develop a baseline for each participating university	Completed.
Activity 1111.2 Tiered university scheme development	Analysis to design a tiered approach to resource allocation – project structure will involve placing universities into “tiers” with project inputs made available based on tier status	Tiered system defined and presented to TC and PSC for discussion. Further refinement underway.
1112 Consulting and applied research program established		
Activity 1112.1 Program development	Terms of Reference will be developed, a call for proposals issued based on topics identified by the project and the Industry-University Task Forces	Scheduled for Q3/Q4. <i>Update: Draft TORs for Consulting and Applied Research program (CARP) under review in October 2016</i>
1113 Industry-university task force established		
Activity 1113.1 Establish Industry-University Task Forces	Industry-University Task Force designed, populated with members and operationalized with bespoke Terms of Reference drafted by the project in consultation with industry, industry associations, accreditation and regulatory agencies and education providers	Industry leader identified (Chris Bendel) and most of the Task Force members identified. <i>Update: TORs in development as of Q3. First meeting expected in late Q3.</i>
1114 Actuarial science and risk management coop programs established		
Activity 1114.1 Staffing	Continuing staff will be added to the Waterloo and Jakarta offices to develop and implement cooperative education/Work Integrated Learning programs involving participating universities and relevant industry.	Project Director, Field Director, Project Officer, Project Finance Officer, Canadian Outreach Officer, Canadian Cooperative Officer all hired and in place. <i>Update: All Indonesian staff selected and have either started or will start in Q3.</i>
Activity 1114.2 Staff development	The Indonesian staff members will require training in the various technical and operational elements of coop education by working with her counterpart at the University of Waterloo. Subsequently, the Canadian will need to develop an understanding of the educational and employment culture of Indonesia.	Training plan in development and scheduled for Q3.

Activity 1114.3 University Engagement and Program Development	Counterpart personnel and units at participating universities will be identified. In instances where an institution does not have a “career center” or equivalent, an analysis will be conducted to determine if and how one can be created.	Most counterpart personnel identified where units exist. Analysis of methods to address identified gaps scheduled for Q4.
Activity 1114.4 Industry Engagement and Program Development	Approaches will include workshops (employers will be invited via industry associations, PAI, university leaders, and/or government leaders), and job development on the ground by the Indonesian Coop specialist including liaison with industry associations and the PAI.	Scheduled for Q4.
Immediate Outcome 1120 Strengthened capacity of actuarial science and risk management teaching professionals (male and female)		
1121 University actuarial science and risk management courses taught at participating universities that address material specified in Indonesian actuarial science professional exams		
Activity 1121.1 Course development plan	See Activity 1111.1 above	
Activity 1121.2 Course development	See Activity 1111.1 above	
1122 University actuarial science and risk management courses taught at participating universities with national and international credits		
Activity 1122.1 Quality assurance via accreditation programs	A situational analysis will be conducted of actuarial accreditation programs in Indonesia and the region, including a comparative analysis of advantages and disadvantages of each approach.	Initial analysis undertaken as part of design mission. Further study to be conducted in Q4 and in next fiscal year.
Activity 1122.2 Workshops relevant to the actuarial profession	Three workshops are planned: ratemaking and reserving for the non-life industry; education and the actuarial profession; and pension risk management.	1 workshop undertaken with over 100 participants from government, associations, universities, industry. Theme revised to reflect demand.
1123 Female and male lecturers and selected practitioners upgraded with actuarial exams and graduate degrees		
Activity 1123.1 Intensive training through short courses	Tentative course titles and dates are: 1) Financial Mathematics – week of May 29; 2) Actuarial Mathematics I – Aug/Sept; 3) Actuarial Mathematics II – Sept/Oct; and 4) Actuarial Mathematics III – Jan 2017	First two short courses completed. Third rescheduled for Q4.
Activity 1123.2 Professional Master of Actuarial Science program at uWaterloo	Participants will be selected based on nominations by participating universities and OJK – using uWaterloo and project acceptance criteria	One candidate successfully completed degree. One new Indonesian university faculty candidate selected but opted to postpone his start until Sept 2017.
Activity 1123.3 New courseware	Open courseware for “micro credentials”	2 courses in testing. <i>Update: 2 courses went live as of October 2016</i>
1124 Indonesia-Canada actuarial science mentorship program established		

Activity 1124.1 Individual training plans developed	Faculty identified for further development not able to participate in the Master's program will be identified and prescriptive training plans developed	Scheduled for Q4.
Activity 1124.2 Mentorship at uWaterloo	Faculty identified for further development through a one term engagement with the Master's program and assigned uWaterloo mentors	Scheduled to start Q4

Outcomes, Outputs and Activities	Description	Progress at Midyear
Immediate Outcome 1130 Improved access to actuarial science and risk management education for male and female university students		
1131 Actuarial science and risk management scholarship program for female and male students designed and operating		
Activity 1131.1 Assess existing industry and government scholarship programs	An analysis of existing scholarship programs provided by government and others will be conducted	Scheduled for Q3. <i>Update: Consultant hired in Q3 to undertake study to ensure scholarship program compares favorably with other available to students. If seem as a highly desirable scholarship that will increase the likelihood of meeting targets.</i>
Activity 1131.2 Design and pilot scholarship program	The scholarship program will accommodate gender and social inclusion with a particular focus on female participation. The Student Equity Scheme will be developed and piloted, with delivery targeting high school students planning to start their studies in Sept 2017	Scheduled to start in Q4 after uWaterloo training of Indonesian Outreach Officer
Activity 1131.3 Scholarship program tested, monitored and revised	The design and delivery of the scholarship program will require careful monitoring, evaluation and likely revision in order to maximize impact.	Interest to date has been low. <i>Update: Consultant hired in Q3 to investigate attitudes and opinions with respect to scholarship program and recommend improvements to increase interest.</i>
1132 Best practice employer actuarial accreditation programs for actuarial accreditation established		
Activity 1132.1 Survey of good practices	To determine practices that can be adopted and replicated by the Indonesian financial industry	Scheduled for Q4. <i>Update: TORs for consultant in development as of Q3.</i>
Activity 1132.2 Employer training program	Will be developed and piloted to introduce selected good approaches emerging from activity 1132.1	To start in Q4.
Activity 1132.3 Monitoring of program adoption and outcomes	Will be initiated late in Year 1 and carried out over the life of the project	To start in Q4.

Outcomes, Outputs and Activities	Description	Progress at Midyear
Immediate Outcome 1210 Increased awareness of actuarial profession		
1211 High school math outreach programs with an actuarial science focus established		
Activity 1211.1 Staffing and staff development	Canadian and Indonesian hiring and training	Staff hired. Training of Indonesian staff to occur in Q3. Activities in schools to start in Q4.
Activity 1211.2 Outreach program detailed planning	Information to be collected and analyzed will include gender disaggregated data, and outreach activities to be implemented	To start in Q4.
Activity 1211.3 Site visits, event participation and liaison approaches	Indicative details and targets follow in Section 5.2 – Detailed Description of Planned Activities	To start in Q4.
Activity 1211.4 Reach Activity	An evaluation approach will be developed to ensure that outreach activities are inclusive in terms of gender, geography and financial means – to inform development and application of scholarship and communications programs	To start in Q4
1212 Actuarial science and risk management awareness campaign delivered		
Activity 1212.1 Website development	Will go live during the second quarter of 2016	Live as of 2016.
Activity 1212.2 Opinion Survey – Indonesia	Will be used to draft the project's communications strategy and plan (activity 1212.3)	To be included as part of completion of baseline data collection which is scheduled for late Q3/early Q4.
Activity 1212.3 Communications strategy and plan	To promote actuarial science and risk management as a discipline and career choice (to be developed following opinion survey (activity 1212.2)	To start in Q4.
1213 Public interest in actuarial science and risk management research and publication program established		
Activity 1213.1 Review of current research and publications	Will be conducted during the first 3 months of project implementation and used to support recommendations regarding best approaches for project interventions (see also: activity 70.1)	Initiated in Q1/Q2 as part of project design. Requires further work in Q3/Q4.
Immediate Outcome 1220 Strengthened development of actuarial profession in Indonesia		
Output 1221 International professional association and regulator linkages	Plan for linkage activities will follow Activity 1122.1	Sept 26, 2016 workshop involved representation from PAI, SOA, and IFoA. Follow-up collaboration planned.
Output 1222 Continuing Professional Development (CPD) seminars and workshops		
Activity 1222.1 Opportunity assessment	To identify opportunities for strengthening the PAI CPD program and identify priority topics (see also: activity 1122)	General opportunities identified as part of PIP preparation. <i>Update: TORs in preparation in Nov for consultant to work with PAI on CPD. Scheduled to start Q4.</i>

Outcomes, Outputs and Activities	Description	Progress at Midyear
Crosscutting Themes, Management, Administration and Reporting		
WBS#50 Project results and risks monitored and assessed, RBM understood and practiced		
Activity 50.1 Risk Register monitored monthly	Activity to be included in work plans and project reporting	Risk monitored quarterly in Q1/Q2. Will continue with monthly monitoring as of Q3.
Activity 50.2 Baseline survey continued	This activity will include consultant procurement, data surveys and a final report	Procurement process to identify Indonesian consultant firm completed Q2. Work rescheduled to Q3/Q4 to allow the M&E specialist to finalize the design of the system and further define the data collection needs and tools.
Activity 50.3 RBM workshops	Workshops will be developed and delivered for project staff in Canada and in Indonesia using a combination of online and face to face instruction	Identification of RBM/M&E specialist initiated in Q2. <i>Update: Specialist hired in October and 1st workshop held end October.</i>
WBS# 60 Gender equity integrated into the project as a cross-cutting theme		
Activity 60.1 Gender specialists contracted	To provide on-going guidance in support of the project's gender strategy	Identification of Canadian Gender Specialist initiated in Q2. <i>Update: Specialist hired in October and 1st workshop held end October.</i>
Activity 60.2 Gender checklist	Developed to ensure that all project activities include an assessment of their congruence with the project gender strategy and their impact on gender equity	Scheduled to start Q3.
Activity 60.3 Training materials	For staff and stakeholders, including material for inclusion in Actuarial Science courses for lecturers and practitioners	Scheduled to start Q3.
Activity 60.4 Workshops	Three gender specific workshops will be designed and delivered – to staff and short term technical advisors in Canada and Indonesia, and for project stakeholders in Indonesia	Scheduled to start Q4.
WBS# 70 Environment, including climate-friendly approaches and requirements integrated into the project as a cross-cutting theme		
Activity 70.1 Environment specialist contracted	Terms of Reference will be drafted within the first month of project implementation	TORs completed. Identification of Environment specialist initiated in Q2. <i>Update: Specialist hired in October and 1st RBMs' M&E workshop held end October included Environment specialist and discussion of carbon and tracking methodology.</i>
Activity 70.2 Project carbon tracking	Design and delivery of a methodology and templates for the project to track its carbon footprint, including recommendations for footprint reduction	Scheduled for Q3.

Outcomes, Outputs and Activities	Description	Progress at Midyear
Activity 70.3 Online workshop	For project staff in Canada and Indonesia to ensure familiarity with the project's environment theme	To start in Q4.
Activity 70.4 Actuaries in Climate for Development Program	Development and support to engage actuaries and risk managers in the program	To start Q4. <i>Update: in development as of Nov.</i>

The hiring and mobilization of the Canadian and Indonesian staff took two to three months longer than anticipated. As of September 30, 2016 and with staffing complete, the project has put in motion measures to mitigate the effects of this delay in most areas. Overall we would still expect to deliver the project within the original project duration. It is acknowledged though that many of the original delivery dates were missed and the project is still closely monitoring the impact of the delays. There are still two activities that are considered at risk and which will require further investigation to identify appropriate mitigation measures. At this stage we are not proposing to drop these activities as the results, which may still be achievable with appropriate mitigation measures. These include sub-activities 1123.2 and 1131.3 as described below:

Number	Description	Risk and Proposed Mitigation Measure
1123.2	Scholarship Program	Although there is interest in the scholarship program, the uptake of the scholarship for the one year Master's program has to date been low. As of the end of Q2, it was recognized that achievement of the project goal of 19 Master's degree was at risk. The reasons for the low uptake vary, ranging from the disruption to family life, the possibility that the scholarship is too low and a lack of incentive to acquire a second Masters. As the actual reasons are not clear, TORs have been prepared as of Q3 to hire a consultant to undertake a review of the situation to allow for mitigation measures to be put in place in Q4.
1131.3	Scholarship program tested, monitored and revised.	The delay in staffing may affect achieving 5,000 actuarial science credits. Work will begin in Q4 to identify measures that will allow for fast tracking of program testing and delivery.

2.2 Management Issues and Adjustments

Project approval was provided by DFATD in March 2015 but for technical and logistical reasons, the Inception Mission for READI was delayed until January 2016 with DFATD approval. The Contribution Agreement was concluded between DFATD and the University of Waterloo on 8 September 2015. This allowed for the delivery of advance action activities prior to the Inception Mission (IM), including the Project Implementation Plan (PIP) as well as the first annual work plan and accompanying budget.

During this semester, significant progress was made in the area of hiring and staffing, however the process took longer than anticipated and resulted in a delay in starting many activities. Identification of all staff was completed in Q2 and mitigation measures have been put into place to address the effects of the delays.

2.2.1 Managing for Results

Although both of the project directors have significant RBM experience, the need for an RBM and M&E specialist was identified in Q1 to assist in the design of an M&E system and the tools required to capture all of the necessary data. The TORs for the specialist were completed in Q1, and the process of hiring the specialist initiated in Q2.

Update: As of Q3 the RBM Specialist, Phil Cox, has been hired and is actively engaged in developing the required M&E system and tool. A review of the PMF and Logic Model was undertaken at the end of October and changes will be proposed as part of the annual reporting and workplan process.

2.2.2 Risk Management

The READI Risk Register is presented in Appendix C. Changes during this semester include the following:

Risk	Description	Initial	June 2016	Sept 2016
FN2	Changes in value of Canadian currency reduce ability of project to undertake planned activities	L = 3 I = 2	L=4 I=3	No changes. Actively engaged in seeking other source of matching funding from Industry and Government to support parallel and complimentary activities
DEV4	Retention and other incentives are not sufficient to encourage faculty to pursue actuarial accreditations	L = 2 I = 2	L=3 I=3	No changes. Actively investigating changes to strategy to better understand low interest and address.

2.2.3 Monitoring and Management of Crosscutting Themes

The TORs for the gender, environment and governance (RBM & Monitoring and Evaluation) specialists were prepared in Q1 and hiring processes were initiated in Q2.

With respect to our governance and sustainability initiative and the three pillars of the project - educational institutions, government agencies and the insurance industry - it should be noted that industry continues to play a leadership role in the project. They were fully engaged in supporting the Sept 26th workshop which saw almost a hundred participants from each sector. Universities have similarly demonstrated their interest in the project with the first two courses seeing between 20 and 30 participants each from the various campuses. OJK, as our primary government partner has been very generous and supportive; as such this component of the project is proceeding well.

Update: As of Q3 all specialists have been engaged and work is progressing on the crosscutting themes.

2.2.4 Management of Day-to-Day Operations

Improvements are being made to communications systems and internet connections to improve the efficiency of operations. In particular, limited internet capacity at the Jakarta office needs to be improved to allow for better communications and to host the monitoring and evaluation data base. Similar improvements in processes and applications are also underway at the uWaterloo READI office to facilitate communications between the offices.

2.3 Financial reports

Forms A and B, are being submitted concurrently with this report and will be submitted under separate cover.

3.0 Outcomes

The project is still in its early stages. As such it is too early to gauge progress toward outcomes (particularly those at the intermediate level. At this stage there is nothing on the project landscape to suggest fault in READI's results logic. Moving in to Q3 systems are in development to allow tracking of cumulative results.

Appendix A: Performance Measurement Framework (PMF)

PERFORMANCE MEASUREMENT FRAMEWORK							
EXPECTED RESULTS	INDICATORS	BASELINE DATA	TARGETS (by project end unless other-wise noted)	DATA SOURCES	DATA COLLECTION METHODS	FREQUENCY	RESPONSIBILITY
ULTIMATE OUTCOME							
1000 Indonesia recognized as a centre of excellence in actuarial science and risk management with attention to gender equity	1000-1 Indonesian university actuarial programs recognized as centres of excellence in actuarial science and risk management with attention to gender equity Note: Recognition could be based on: 1) program stream; 2) lecturers who demonstrate a substantial commitment to actuarial science; 3) scholarship/ research; and 4) gender sensitization	No programs recognized	1 by 2019, 2 by project end	In-country and international published documents Institute publications	Review of university accreditations Document reviews	Baseline Mid-term review Five-year review	Project Steering Committee (PSC) – baseline Global Affairs Canada – project reviews (mid-term, five-year)
	1000-2 Perception of Indonesian and international professionals active in actuarial science of the quality and gender equity of Indonesia's actuarial science and risk management education and profession	IM finding: Indonesia not producing adequate numbers compared to some ASEAN countries (e.g., Singapore, Malaysia) and quality has excessive variance Perception survey will establish qualitative baseline	Median perception of Indonesia as a centre of excellence: 4 (out of 5 – very low to very high quality) across stakeholder groups	Surveys and interviews with stakeholder groups (industry, government, educators, students, professionals) including leaders and members of PAI and international actuarial associations	Surveys and interviews	Baseline Mid-term review Five-year review	PSC – baseline Global Affairs Canada – project reviews (mid-term, five-year)

PERFORMANCE MEASUREMENT FRAMEWORK							
EXPECTED RESULTS	INDICATORS	BASELINE DATA	TARGETS (by project end unless other-wise noted)	DATA SOURCES	DATA COLLECTION METHODS	FREQUENCY	RESPONSIBILITY
INTERMEDIATE OUTCOMES							
1100 Increased employment of female and male Indonesian accredited actuarial science and risk management graduates by Indonesian businesses, universities and government agencies	1100-1 Number of female and male actuarial science graduates in Indonesia with nationally and internationally recognized credentials employed by Indonesian businesses, universities and government agencies	2016 – PAI membership: 206 Fellows, 193 Associates	500 graduates with employment in a field related to actuarial science and risk management (at least 50% female)	- Participating institutions - DIKTI - PAI - AAJI, AAUI - local industry	Analysis of student statistics Tracer study tracking, time to employment nature of work, salary	Annual summary Mid-term review Five-year review	PSC – annual summary Global Affairs Canada – project reviews (mid-term, five-year) Participating universities – tracking database of graduates
	1100-2 Perception by Indonesian business, universities, government agencies of availability and quality of actuarial science graduates	Baseline survey will establish starting point – progress targets to be confirmed in AWP's	Majority of survey and interview respondents perception is “improved” or “very good” or (4 or 5 out of score of 5) availability and quality of graduates	- PAI - OJK - Local industry - Participating institutions	Project surveys and interviews “Quality” attributes for perception surveys to be confirmed in consultation with stakeholders	Baseline Mid-term review Five-year review	PSC – baseline Global Affairs Canada – project reviews (mid-term, five-year)
1200 Strengthened actuarial science and risk management profession in Indonesia	1200-1 Perception of actuarial profession in Indonesia among industry, actuaries and regulatory bodies, including sensitivity to gender balance/ experiences 1200-2 Awareness of actuarial profession in Indonesia among high school and university students and families, including sensitivity to gender balance/experiences	Baseline survey will establish starting point – progress targets to be confirmed in AWP's	Improved perception and sensitivity to gender balance and experiences of the actuarial profession in Indonesia – among businesses involving risk management, actuaries	- Sample of high schools and universities (math students and their families) - Participating institutions - DIKTI - PAI	Project surveys and interviews “Quality” attributes for perception surveys to be developed in consultation with stake-	Baseline Mid-term review Five-year review	PSC – baseline Global Affairs Canada – project reviews (mid-term, five-year)

PERFORMANCE MEASUREMENT FRAMEWORK							
EXPECTED RESULTS	INDICATORS	BASELINE DATA	TARGETS (by project end unless other-wise noted)	DATA SOURCES	DATA COLLECTION METHODS	FREQUENCY	RESPONSIBILITY
			and regulatory bodies Increased awareness of, and sensitivity to gender balance/experiences, of the actuarial profession among high school and university students and families	- AAJI, AAUI - Local industry	holders (surveys will use a common five-point scale)		
IMMEDIATE OUTCOMES							
1110 Strengthened linkages between industry and university education	1110-1 Number of linkages established between industry and universities involving the actuarial profession	No formal linkages on inception	2 industry-university task forces established by 2017	Project reports	Analysis of project reports	Annual summary	PSC – annual summary
	1110-2 Perception by Indonesian business, universities, government agencies of strengthened linkages between industry and education, with sensitivity to gender balance	N/A	Majority of survey and interview respondents perception is “very much improved” or “improved” (4 or 5 out of score of 5) strength of linkages	- Participating institutions - DIKTI - PAI - AAJI, AAUI - local industry	Project surveys and interviews “Quality” attributes for perception surveys to be developed in consultation with stakeholders	On establishment of linkages Mid-term review Five-year review	PSC – on establishment of linkages Global Affairs Canada – project reviews (mid-term, five-year)

PERFORMANCE MEASUREMENT FRAMEWORK							
EXPECTED RESULTS	INDICATORS	BASELINE DATA	TARGETS (by project end unless other-wise noted)	DATA SOURCES	DATA COLLECTION METHODS	FREQUENCY	RESPONSIBILITY
1120 Strengthened capacity of female and male actuarial science and risk management teaching professionals in Indonesia	1120-1 Number of female and male lecturers at participating Indonesian universities who are: 1) an associate; or 2) a fellow of an actuarial association 1120-2 Number of female and male lecturers who have an advanced degree in a field related to actuarial science and risk management	One professor with a PhD in actuarial science (ITB)	20 lecturers (at least ten female) who demonstrate a substantial commitment to actuarial science teaching at universities with actuarial science streams	- Project reports - Participating institution reports	Analysis of project and participating institution reports	Annual summary	PSC – annual summary
	1120-3 Perception by Indonesian business, universities, government agencies of the strength of actuarial science and risk management teaching in Indonesia	IM findings to be confirmed with survey on project implementation	Majority of survey and interview respondents perception is “quite strong” or “very strong”	- Participating institutions - DIKTI - PAI - AAJI, AAUI - local industry	Surveys and interviews	Baseline Mid-term review Five-year review	PSC – baseline Global Affairs Canada – project reviews (mid-term, five-year)
1130 Improved access to actuarial science and risk management education for female and male university students in Indonesia	1130-1 Number of female and male students enrolled in actuarial science streams in Indonesian universities	2 Masters streams (UI, ITB) <40 students No undergraduate actuarial science streams approved and with enrolled students	- 600 students (at least 300 female) by 2019 (includes all students enrolled in identifiable actuarial science streams at identified participating universities)	- Project reports - Participating institutions	Analysis of project and participating institution reports	Annual summary	PSC – annual summary
	1130-2 Perception by Indonesian business, universities, government agencies and actuarial science students of educational opportunities in actuarial science, with	To be collected	Majority of survey and interview respondents perception is “very good” or “im-	- Participating institutions - DIKTI - PAI - AAJI, AAUI	Project surveys and interviews “Quality” attributes for perception	Baseline Mid-term review Five-year review	PSC – Baseline Global Affairs Canada – project reviews (mid-term, five-year)

PERFORMANCE MEASUREMENT FRAMEWORK							
EXPECTED RESULTS	INDICATORS	BASELINE DATA	TARGETS (by project end unless other-wise noted)	DATA SOURCES	DATA COLLECTION METHODS	FREQUENCY	RESPONSIBILITY
	sensitivity to gender balance/ experiences		proved” educational opportunities in actuarial science, including sensitivity to gender balance/ experiences	- local industry	surveys to be developed in consultation with stakeholders (5-point scale)		
1210 Increased awareness of actuarial profession	1210-1 High school and university students and their families’ awareness and associated perception of actuarial profession in Indonesia, with attention to gender issues	To be collected	Majority of survey and interview respondents’ are aware of the actuarial profession and attention to gender issues, with a “good” or “very good” perception of the profession	- Media and literature sources - Indonesia and international surveys or reviews	Project surveys and interviews Media and literature analysis	Baseline Mid-term review Five-year review	PSC – Baseline Global Affairs Canada – project reviews (mid-term, five-year)
1220 Strengthened development of actuarial profession in Indonesia	1220-1 Perception of the development of the actuarial profession among industry, actuaries and regulatory body, with attention to gender issues	To be collected	Majority of survey and interview respondents perceive the development of the actuarial profession, with attention to gender issues, in Indonesia over the past five years to be “very good” or “good”	- Participating institutions - DIKTI - PAI - AAJI, AAUI - local industry	Project surveys and interviews “Quality” attributes for surveys to be developed in consultation with stakeholders	Baseline Mid-term review Five-year review	PSC – Baseline Global Affairs Canada – project reviews (mid-term, five-year)
OUTPUTS							
1111 University actuarial science and risk management streams of study established	1111-1 Number of actuarial science and risk management streams of study established and recognized in Indonesian universities	Two masters in actuarial science programs (UI, ITB), One draft	4 undergraduate streams of study (among participating universities)	Participating institution and project reports	Document review	Annual	PSC – annual summary

PERFORMANCE MEASUREMENT FRAMEWORK							
EXPECTED RESULTS	INDICATORS	BASELINE DATA	TARGETS (by project end unless other-wise noted)	DATA SOURCES	DATA COLLECTION METHODS	FREQUENCY	RESPONSIBILITY
		Bachelor's program in approval process (Surya)					
1112 Consulting and applied research program established and recognized	1112.1 Number of papers/technical reports produced	N/A	40 papers/ technical reports by project end (10 by 2017)	In-country and international published documents	Document review	Annual	PSC – annual summary
	1112.2 Perception of quality and value of program by stakeholders	N/A	Majority of survey and interview respondents perception is “valuable” or “very valuable”	- Participating institutions - DIKTI - PAI - AAJI, AAUI - local industry	Project surveys and interviews	Mid-term review Five-year review	Global Affairs Canada – project reviews (mid-term, five-year)
1113 Industry-university task forces established	1113.1 Number industry-university task forces established	None	One life insurance task force; and one general insurance, pension and health task force by 2017	Project reports	Document review	Annual	PSC – annual summary
	1113.2 Perception of effectiveness of task forces by stakeholders	N/A	Majority of survey and interview respondents perception is “effective” or “very effective”	- Participating institutions - DIKTI - PAI - AAJI, AAUI - local industry	Project surveys and interviews	Mid-term review Five-year review	Global Affairs Canada – project reviews (mid-term, five-year)
1114 Actuarial science and risk management coop programs established	1114-1 Number of coop programs that meet criteria established by project (duration, number of placements, nature of work and compensation) 1114-2 Number coop terms offered by employers and utilized by students (M/F)	No current coop programs or coop terms	3 coop programs – by project end 270 coop terms (50% by females)	Project reports	Document review	Annual	PSC – annual summary

PERFORMANCE MEASUREMENT FRAMEWORK							
EXPECTED RESULTS	INDICATORS	BASELINE DATA	TARGETS (by project end unless other-wise noted)	DATA SOURCES	DATA COLLECTION METHODS	FREQUENCY	RESPONSIBILITY
1121 University actuarial science and risk management courses taught at participating universities that address material specified in Indonesian actuarial science professional exams	1121-1 Number of actuarial science and risk management courses taught at participating universities that address material specified in Indonesian actuarial science professional exams	To be confirmed	Five campuses, each teaching between 5 and 7 courses (25-35 courses total), recognized by PAI	Project reports	Document review	Annual	PSC – annual summary
1122 University actuarial science and risk management courses offered at participating universities with national and international credits	<p>1122-1 Number of courses offered at participating universities that are consistent with International Actuarial Association actuarial syllabus or meet national (PAI) standards</p> <p>1122-2 Number of courses that have exams and results externally audited by a professional actuarial body (PAI, other)</p> <p>1122-3 Number of courses that receive SOA Validation of Education Experience (VEE) credits</p>	IM finding: one course (UPH) currently receives SOA VEE credit	40 courses offered by participating universities audited by PAI that are consistent with IAA syllabus, including 15 courses audited by SOA for VEE	Project reports	Document review	Annual	PSC – annual summary

PERFORMANCE MEASUREMENT FRAMEWORK							
EXPECTED RESULTS	INDICATORS	BASELINE DATA	TARGETS (by project end unless other-wise noted)	DATA SOURCES	DATA COLLECTION METHODS	FREQUENCY	RESPONSIBILITY
1123 Female and male lecturers and selected practitioners upgraded with actuarial exams and graduate degrees	<p>1123-1 Number of female and male lecturers and practitioners supported through the project with professional actuarial credits</p> <p>1123-2 Number of female and male lecturers and practitioners supported through the project with actuarial science and risk management graduate degrees</p>	N/A	<p>19 Masters in actuarial science and risk management completed by lecturers and selected practitioners supported through the project (ten by females)</p> <p>100 Professional Actuarial Credits achieved by lecturers and selected practitioners (50 by females) supported through the project</p>	Project reports	Document review	Annual	PSC – annual summary
1124 Indonesia-Canada actuarial science mentorship program established	<p>1124-1 Number of non-credit courses taught by visiting lecturers (female/male)</p> <p>1124-2 Number of workshops delivered by visiting experts (female/male)</p> <p>1124-3 Number of lecturer-months of female and male Indonesian lecturers participating in job shadowing and 1 term of graduate program in actuarial science at uWaterloo</p>	N/A	<p>25 courses (50% female participation)</p> <p>12 workshops (50% female participation)</p> <p>24 lecturer- months (50% female participation)</p>	Project reports	Document review	Annual	PSC – annual summary

PERFORMANCE MEASUREMENT FRAMEWORK							
EXPECTED RESULTS	INDICATORS	BASELINE DATA	TARGETS (by project end unless other-wise noted)	DATA SOURCES	DATA COLLECTION METHODS	FREQUENCY	RESPONSIBILITY
1131 Actuarial science and risk management scholarship program students designed and operating	<p>1131-1 Number and value of scholarships awarded by target student population (gender, regional, means)</p> <p>1131-2 Number of student-years completed by scholarship students</p> <p>1131-3 Number actuarial science credits earned by scholarship students by target student population (gender, regional, means)</p> <p>1131-4 Number of actuarial science professional exams written and passed by female and male participants in development programs</p>	N/A	<p>\$1.9 million in scholarships awarded</p> <p>2,500 student-years completed by scholarship students (1,250 female)</p> <p>5,000 actuarial science credits earned (2,500 by females)</p> <p>3,000 exams written (66% pass rate) with at least 1,500 written and 1,000 passed by females</p>	<p>Project report</p> <p>Participating institution reports</p> <p>GOI reports</p> <p>PAI and international association reports</p>	Document review	Annual	PSC – annual summary
1132 Best practice employer actuarial accreditation programs for actuarial accreditation supported	<p>1132-1 Number of companies with newly established or strengthened actuarial development programs</p> <p>1132-2 Number of participants (male/female) in employer-actuarial science student development programs</p> <p>1132-3 Number of exams written by female and male participants in development programs</p>	N/A	<p>30 companies with new or strengthened actuarial development programs</p> <p>450 participants in employer-actuarial science student development programs (at least 225 female)</p> <p>1200 actuarial exams written by program participants (at least 600 written by females)</p>	<p>Project reports</p> <p>Employer and student participant reports</p> <p>PAI and international association exam data</p>	Document review	Annual	PSC – annual summary

PERFORMANCE MEASUREMENT FRAMEWORK							
EXPECTED RESULTS	INDICATORS	BASELINE DATA	TARGETS (by project end unless other-wise noted)	DATA SOURCES	DATA COLLECTION METHODS	FREQUENCY	RESPONSIBILITY
1211 High school math outreach programs with an actuarial science focus established	1212-1 Number of female and male students outreached 1212-2 Number of math workshops conducted by men and women 1211-3 Number of female and male students participating in math competitions	No current programs	50,000 students (50% female) reached through outreach programs at three different universities 450 workshops delivered 5,000 CEMC (uWaterloo) and/or partner university math competitions written (2,500 by females)	Project reports	Document review	Annual	PSC – annual summary
1212 Actuarial science and risk management awareness campaign delivered	1212-1 Number of marketing campaigns developed and delivered to target groups with a gender lens 1212-2 Effectiveness of the campaign in achieving identified objectives	N/A	Up to 3 annual marketing campaigns with a gender lens	Project reports Pre and post campaign surveys (to assess effectiveness)	Document reviews Project surveys	Annual	PSC – annual summary
1213 Public interest in actuarial science and risk management research and publication program established	1213-1 Number and quality of papers published relevant to risk management, insurance and the public good	N/A	25 public interest and policy papers (with partners) by 2020 (10 by 2017)	Project reports Experts familiar with subjects of papers and target audiences	Document reviews Interviews with identified experts Project surveys	Annual	PSC – annual summary

PERFORMANCE MEASUREMENT FRAMEWORK							
EXPECTED RESULTS	INDICATORS	BASELINE DATA	TARGETS (by project end unless other-wise noted)	DATA SOURCES	DATA COLLECTION METHODS	FREQUENCY	RESPONSIBILITY
1221 International professional association and regulator linkages supported	1221-1 Number of workshops involving Indonesian and international regulatory bodies and actuarial associations addressing professional topics 1221-2 Number of exchanges involving female and male Indonesian and international regulators and actuarial associations	N/A	5 workshops completed by 2020 (2 by 2017), with 50% participation by females 10 exchanges completed by 2020 (5 by 2017) (50% by females)	Project reports	Document review	Annual	PSC – annual summary
1222 Continuing Professional Development (CPD) seminars and workshops conducted	1222-1 Number of professional seminars and workshops conducted 1222-2 Number of female and male seminar participants	N/A	20 seminars or workshops (at least one day in length) 400 seminar participants (at least 200 females)	Project reports	Document review	Annual	PSC – annual summary

Appendix B: Annual Work Plan

Immediate Outcome	Planned Outputs	Activity #	Activities (2016)	Q1			Q2			Q3			Q4			Q1						
				Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar				
Cross Cutting Themes, Management, Administration and Reporting	Offices staffed in Canada and Indonesia	10	Staffing action																			
	Goods, assets and supplies procured in Canada and Indonesia	20	Offices effectively equipped through a robust procurement process, renting when possible																			
	READI Project provides secretariat and technical support to the PSC, Technical Committee and Task Forces		30	Annual PSC meeting																		
				Bi-annual Technical Committee meetings																		
				Task Force meetings																		
	Work plans, budgets and reports prepared and submitted as per CA Appendix D		40	PIP																		
				1st Annual Work Plan and budget																		
				1st Annual Report																		
	Project results and risks monitored and assessed, RBM understood and practiced.		50	Mid year report																		
				☐ RBM Developed and Implemented																		
50.1 Risk Register monitored monthly																						
50.2 ☒ Baseline survey continued																						
☒ Project reporting is consistent with LM and PMF																						
Apply gender equity principles to achieve gender equality					☒ Gender Equity Strategy Implemented																	
Implement the project in a climate friendly way while engaging actuaries and risk managers in a program focused on climate and development					70	☒ Environment and Climate Program Developed and Delivered																
						☒ Pre-Inception Phase																
1110 Strengthened linkages between industry and education					1111.1	☒ Curriculum Review																
						1111.2 ☒ Tiered University Scheme Development																
	1112.1 ☒ Research Program Est																					
	Industry-university task forces established																					
	Actuarial science and risk management coop programs established		1114.1 ☒ Indonesian (ICO) and Canadian (CCO) Coop/WIL Officer staffing																			
		1114.3 Deliver Coop 1 Short Course (University)																				
		1114.3 Deliver Coop 2 Short Course (University)																				
		1114.4 Deliver Coop 3 Short Course (Industry)																				
		1114.4 Deliver Coop 4 Short Course (Industry)																				
	1120 Strengthened capacity of actuarial science and risk management teaching professionals (female and male) in Indonesia																					

Immediate Outcome	Planned Outputs	Activity #	Activities (2016)	Q1			Q2			Q3			Q4			Q1		
				Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar
	University actuarial science and risk management courses taught at participating universities that address material specified in Indonesian actuarial science professional exams		See Activity 1111 above															
	University actuarial science and risk management courses taught at participating universities with national and international credits		See Activity 1111 above.															
		1122.1	Situational analysis of accreditation programs in Indonesia and the region															
		1122.2	Ac Sci Wkshop 1: Ratemaking															
		1122.2	Ac Sci Wkshop 2: Education and the actuarial profession															
		1122.2	Ac Sci Wkshop 3: Pension Risk Management															
	Female and male lecturers and selected practitioners upgraded with actuarial exams and graduate degrees																	
		1123.1	Ac Sci Course 1															
		1123.1	Ac Sci Course 2															
		1123.1	Ac Sci Course 3															
		1123.1	Ac Sci Course 4															
		1123.2	* Scholarship Prog 2016															
	Indonesia-Canada actuarial science mentonship program established		* Faculty and other eligible participants selected from participating organizations spend up to 4 months at UW															
1130 Improved access to actuarial science and risk management education for male and female university students in Indonesia	Actuarial science and risk management scholarship program for female and male students designed and operating		* Scholarship Program for Study in Indonesia Review, revise, repeat															
	Best practice employer actuarial accreditation programs for actuarial accreditation established		* Practitioner Support Program															
1210 Increased Awareness of actuarial profession	High school math outreach programs with an actuarial science focus established	1211.1	* IOO and COO staffing															
		1211.3	School visits															
		1211.4	Think about AS Day															
		1211.4	Career Fair															
		1211.4	Education Fair															
		1211.4	*Reach*															
	Actuarial science and risk management awareness campaign delivered		* Communication and Promotion															
		70.1	* Confirm carbon footprint tracking methodologies and templates for project reporting															
	Public Interest in actuarial science and risk management research and publication program established		See Activity 70 for 1et year activities															
		1122.1	Review of existing research and publications and direction setting for project support															

Midyear Report to September 30, 2016

10 to 70 Cross Cutting themes, Management, Administration and Reporting

WBS#	Immediate Outcome	Planned Outputs	Activity #	Activities (2016)	Start	Finish	Status	% Complete	Comments
10	Cross Cutting Themes, Management, Administration and Reporting	Offices Staffed	10	Staffing action	02/22/16	08/31/16	Complete	100%	All staff in both offices identified and contracting underway.
20		Goods, assets and supplies procured in Canada and Indonesia	20	Offices effectively equipped through a robust procurement process, renting when possible	02/22/16	09/01/16	On Track	90%	Minor equipment adjustments and additions underway
30		READI Project provides secretariat and technical support to the PSC, Technical Committee and Task Forces	30	Annual PSC & TC meetings, Task Force Mtgs	08/15/16	03/31/17	On Track	50%	PSC & TC complete, Task Force lead identified, planning underway
40		Work plans, budgets and reports prepared and submitted as per CA Appendix D	40	PIP, AWP, 1st Annual Report, Midyear Report	06/28/16	11/15/16	On Track	100%	PIP, AWP, 1st Annual Report Complete, Midyear on track
50		Project results and risks monitored and assessed, RBM understood and practised.	50	RBM Developed and Implemented	07/11/16	10/28/16	In Progress	24%	Risk Register updated, RBM specialist hiring underway, once M&E is in place, baseline study will be completed and monitoring process will be implemented
60		Apply gender equity principles to achieve gender equality	60	Gender Equity Strategy Implemented	04/04/16	12/30/16	On Track	25%	Hiring of Cdn Gender specialist underway, Indonesian specialist hiring to follow, some data and materials already collected, requires further work
70		Implement the project in a climate friendly way while engaging actuaries and risk managers in a program focused on climate and development	70	Environment and Climate Program Developed and Delivered	07/11/16	03/30/17	On Track	6%	Hiring of Specialist underway. Activities scheduled for Q3/ Q4

Midyear Report to September 30, 2016

1110 Strengthened Linkages Between Industry and University Education

WBS#	Related WBS#	Immediate Outcome	Planned Outputs	Activity #	Activities (2016)	Start	Finish	Status	% Complete	Comments
1110		Strengthened linkages between Industry and university education	2 industry university task forces established by 2017	1110	☐ Strengthened linkages Industry - University	02/22/16	11/20/20	On Track	14%	Potential members of task force identified, lead for task force identified. Task Force discussion suggesting that 2 task forces may not be necessary. Will start with one and determine in 2017 if a second is warranted. TORs in preparation. Curriculum review completed, tiered scheme developed, online course needs identified, delivery in progress
1111		Strengthened linkages between Industry and university education	University actuarial science and risk management streams of study established	1111	☑ Curriculum Review	02/22/16	02/26/18	On Track	26%	Review completed, tiered scheme drafted, course needs mapped and delivery in progress
1112		Strengthened linkages between Industry and university education	Consulting and applied research program established	1112	☑ Consulting and applied research	01/02/17	02/05/18	Not Started	0%	scheduled for 2017/18
1113		Strengthened linkages between Industry and university education	Industry-university task forces established	1113	☑ Task Force Defined, Established and Operational	07/04/16	09/12/16	On Track	32%	Potential members identified. Draft TORs in prep.
1114	10	Strengthened linkages between Industry and university education	Actuarial science and risk management coop programs established	1114	☐ Coop program established and operational	02/22/16	11/20/20	On Track	12%	Indonesian and Cdn Coop Officers hired. Earliest start date for Indonesian officer was October so training delayed to Nov/Dec, engagement program to start Q4

Midyear Report to September 30, 2016

1120 Strengthened capacity of actuarial science and risk management teaching professionals (female and male) in Indonesia

WBS#	Related WBS#	Immediate Outcome	Planned Outputs	Activity #	Activities (2016)	Start	Finish	Status	% Complete	Comments
1120		Strengthened capacity of actuarial science and risk management teaching professionals (female and male) in Indonesia	20 lecturers demonstrate a substantial commitment to Actuarial Science teaching at universities with actuarial science streams. Majority of survey and interviews respondents perception is "quite strong" or "Very strong"	1120	☒ Capacity building, courses with national and international credits, 1 Yr Masters, < 4 month study programs	02/03/16	02/22/21	At Risk	9%	one student/graduate only so far
1121			University actuarial science and risk management courses taught at participating universities that address material specified in Indonesian actuarial science professional exams	1121	☒ Strengthened capacity in Actuarial Science and Risk Management	09/05/16	02/22/21	Not Started	0%	Scheduled for 2017/18
1122			University actuarial science and risk management courses taught at participating universities with national and international credits	1122	☒ Courses with National and International Credits	09/05/16	03/30/17	On Track	27%	2 courses complete, 1 scheduled, accreditation analysis started
1123		Strengthened capacity of actuarial science and risk management teaching professionals (female and male) in Indonesia	Female and male lecturers and selected practitioners upgraded with actuarial exams and graduate degrees	1123	☒ Lecturers and practitioners upgraded with short courses, 1 yr Prof Master's program and on-line learning	02/03/16	07/20/18	At Risk	25%	2 Short courses complete, 3 on schedule for Q4, 1 year scholarship program seeing few applicants so at risk, online learning moving in advance of schedule
1124		Strengthened capacity of actuarial science and risk management teaching professionals (female and male) in Indonesia	Indonesia-Canada actuarial science mentorship program established	1124	☒ Faculty and other eligible participants selected from participating organizations spend up to 4 months at UW	01/02/17	09/07/17	Not Started	0%	Scheduled for Q4 and 2017/18

Midyear Report to September 30, 2016

1130 Improved access to actuarial science and risk management education for male and female university students in Indonesia

WBS#	Related WBS#	Immediate Outcome	Planned Outputs	Activity #	Activities (2016)	Start	Finish	Status	% Complete	Comments
1130		Improved access to actuarial science and risk management education for male and female university students in Indonesia	600 students by 2019. Majority of survey and interview respondents perception is "very good" or "improved" educational opportunities	1130	[-] High school Scholarship program and practitioner support program	07/04/16	05/28/18	Not Started	1%	Outreach and scholarship program will get underway after Officer trained at UW in Nov. Program to start in earnest in Q4
1131		Improved access to actuarial science and risk management education for male and female university students in Indonesia	Actuarial science and risk management scholarship program for female and male students designed and operating	1131	[+] Scholarship Program for Study in Indonesia	07/04/16	12/16/16	At Risk	6%	Indonesian Outreach officer training at UW in November. Outreach and scholarship program to start 2017. Delay in delivering program could affect achieving target of 500 graduates
1132		Improved access to actuarial science and risk management education for male and female university students in Indonesia	Best practice employer actuarial accreditation programs for actuarial accreditation established	1132	[+] Practitioner Support Program	01/02/17	05/28/18	In Progress	0%	Scheduled for January 2017

Midyear Report to September 30, 2016

1210 Increased Awareness of Actuarial Profession

WBS#	Related WBS#	Immediate Outcome	Planned Outputs	Activity #	Activities (2016)	Start	Finish	Status	% Complete	Comments
1210		Increased Awareness of Actuarial Profession	Majority of survey and interview respondents are aware of the actuarial profession and attention to gender issues with a "good" or "very good"	1210	[-] Highschool Outreach, communications, promotion and publications programs	02/29/16	03/01/19	In Progress	19%	Outreach officers hired. Training at UW in Nov/Dec. Outreach starts in Indonesia in Q4
1211			High school math outreach programs with an actuarial science focus established	1211	[+] Highschool Outreach program	02/29/16	11/30/16	In Progress	78%	IOO and COO in place by end August 2016. Training in Canada Nov/Dec, outreach in Indonesia starts Q4. Delay is starting by 2 to 3 months
1212			Actuarial science and risk management awareness campaign delivered	1212	[+] Communications and Promotion	10/17/16	10/28/16	Not Started	43%	Communications strategy will be developed after data is collected as part of the development of the M&E system and the baseline study. In interim, high school level videos being developed.
1213			Public interest in actuarial science and risk management research and publication program established	1213	[+] See Activity 70 for 1st year activities	09/05/16	03/01/19	In Progress	0%	

Appendix C: Risk Register

RISK REGISTER		L-likelihood	I-impact:	1-very low	2-low	3-high	4-very high
Risk Definition		Risk Response		Investment LM Result Statement	Jan. 2016 Initial Ass't	Jun. 2016 Changes, Comments	Sept. 2016 Changes, Comments
Operational Risks							
OP1	Availability of Canadian and Indonesian personnel to participate in project activities is low due to work obligations at home institutions	<ul style="list-style-type: none"> Engage multiple university partners Alternative partner strategy will broaden pools of expertise and increase availability of appropriate personnel 		1110 Strengthened linkages between industry and education 1120 Strengthened teaching of actuarial science and risk management in Indonesia	L = 2 I = 2	No changes	No changes
OP2	Resistance to education program change including coop	<ul style="list-style-type: none"> Multiple partner approach to spread risk Flexible and iterative implementation process Provide global coop education outcome information to relevant government agencies (DIKTI) to increase receptivity and accelerate implementation 		1110 Strengthened linkages between industry and education 1120 Strengthened teaching of actuarial science and risk management in Indonesia	L = 2 I = 2	No changes	No changes
Financial Risks							
FIN1	Interruptions or delays in funding impact activities	<ul style="list-style-type: none"> Financial management system includes contingency funding mechanism 		1100 Increased availability of Indonesian trained actuarial science and risk	L = 1 I = 1	No changes	No changes

RISK REGISTER		L-likelihood	I-impact:	1-very low	2-low	3-high	4-very high	
Risk Definition		Risk Response		Investment LM Result Statement		Jan. 2016 Initial Ass't	Jun. 2016 Changes, Comments	Sept. 2016 Changes, Comments
		<ul style="list-style-type: none"> • Pre-project funding commitment to support advanced project action • Multiple funding sources, for example, industry, government agencies, and international multi-lateral funding agencies. 		management graduates to Indonesian businesses, universities and government agencies 1200 Strengthened actuarial science and risk management profession in Indonesia				
FIN2	Changes in value of Canadian currency reduce ability of project to undertake planned activities	<ul style="list-style-type: none"> • Regular review of budget and costs of planned versus actual activities, assessment of cost effectiveness of each activity stream relative to expected and actual results, and adjustment following review and approval through project governance mechanisms • Seek supplemental or matching funding from alternative sources, for example, industry, government agencies, international multi-lateral funding agencies 		1100 Increased availability of Indonesian trained actuarial science and risk management graduates to Indonesian businesses, universities and government agencies 1200 Strengthened actuarial science and risk management profession in Indonesia		L = 3 I = 2	L=4 I=3	No changes. Actively engaged in seeking other source of matching funding from Industry and Government to support parallel and complimentary activities
Development Risks								
DEV1	Indonesian and regional political instability constrains	<ul style="list-style-type: none"> • Use technology to substitute for live presence 		1100 Increased availability of Indonesian trained actuarial science and risk		L = 2 I = 2	No changes	No changes

RISK REGISTER		L-likelihood	I-impact:	1-very low	2-low	3-high	4-very high	
Risk Definition		Risk Response		Investment LM Result Statement		Jan. 2016 Initial Ass't	Jun. 2016 Changes, Comments	Sept. 2016 Changes, Comments
	travel to Indonesia for the provision of Canadian technical assistance	<ul style="list-style-type: none"> • Develop travel risk mitigation program • Substitute in-country expertise 		management graduates to Indonesian businesses, universities and government agencies 1200 Strengthened actuarial science and risk management profession in Indonesia				
DEV2	Global and/or regional economic instability leads to lower contribution from and engagement with industry project partners.	<ul style="list-style-type: none"> • National and multi-national partners engaged • Project budget reallocations to substitute for industry contributions • Lock-in industry contributions at project outset in a secure trust account • Implement risk averse fund management systems 		1110 Strengthened linkages between industry and education		L = 2 I = 2	No changes	No changes
DEV3	Target universities fail to retain qualified lecturers	<ul style="list-style-type: none"> • Apply existing government post-scholarship retention practices • Work with industry partners to discourage hiring lecturers qualified through project mechanisms • Develop retention programs 		1120 Strengthened teaching of actuarial science and risk management in Indonesia		L = 2 I = 2	No changes	No changes
DEV4	Retention and other incentives are	<ul style="list-style-type: none"> • Provide strong incentives and rewards on completion, 		1120 Strengthened teaching of actuarial		L = 2 I = 2	L=3 I=3	No changes. Actively investigating changes

RISK REGISTER		L-likelihood	I-impact:	1-very low	2-low	3-high	4-very high	
Risk Definition		Risk Response		Investment LM Result Statement		Jan. 2016 Initial Ass't	Jun. 2016 Changes, Comments	Sept. 2016 Changes, Comments
	not sufficient to encourage faculty to pursue actuarial accreditations	to encourage capable faculty to pursue accreditations during degree programs and/or while they are working		science and risk management in Indonesia				to strategy to better understand low interest and address.
DEV5	There are inadequate well prepared and capable students interested in actuarial science study programs	<ul style="list-style-type: none"> • Early development of outreach programs at each participating university • Strong promotion of actuarial science as an in-demand professional qualification with excellent employment opportunities • Robust scholarship program to compete with other career options perceived to be "more glamorous" 		1211 High school math outreach programs established with sensitivity to gender participation/representation		L = 2 I = 2	No changes	No changes.
DEV6	Students achieving internationally recognized accreditations leave Indonesia for better opportunities abroad and do not contribute to diminishing the actuarial shortage	<ul style="list-style-type: none"> • Reconsider the value of international accreditation at this time • Encourage employers to emulate international compensation packages, particularly those available in the region 		1100 Increased availability of Indonesian trained actuarial science and risk management graduates to Indonesian businesses, universities and government agencies 1200 Strengthened actuarial science and risk management profession in Indonesia		L = 2 I = 2	No changes	No changes.

RISK REGISTER		L-likelihood	I-impact:	1-very low	2-low	3-high	4-very high	
Risk Definition		Risk Response		Investment LM Result Statement		Jan. 2016 Initial Ass't	Jun. 2016 Changes, Comments	Sept. 2016 Changes, Comments
Overall Risk Level						The overall risk level for the project is low		