Project No: 283093

Project Acronym: ROBIN

Project Full Name: Role Of Biodiversity In climate change mitigatioN

Final Report

Period covered: from 01/11/2011 **to** 31/10/2015

Start date of project: 01/11/2011

Project coordinator name:
Dr. Terry Parr

Date of preparation: 17/11/2015

Date of submission (SESAM): 29/01/2016

Project coordinator organisation name:
NATURAL ENVIRONMENT RESEARCH COUNCIL

Version: 1

Final Report

PROJECT FINAL REPORT

Grant Agreement number:	283093
Project acronym:	ROBIN
Project title:	Role Of Biodiversity In climate change mitigatioN
Funding Scheme:	FP7-CP-IP-SICA
Project starting date:	01/11/2011
Project end date:	31/10/2015
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Final Report

Please note that the contents of the Final Report can be found in the attachment.

4.1 Final publishable summary report

Executive Summary

Tropical forest landscapes are hot spots for biodiversity and hold substantial stores of carbon. They are used by forestry, agriculture, nature conservation and other sectors, and they must provide for peoples' health, well-being and economic security. The aim of the EC's ROBIN project was to reconcile these many and potentially conflicting demands by understanding, measuring and quantifying the role of biodiversity in mitigating climate change and in providing other benefits to people. It addressed two main questions: do forests and forest landscapes rich in biodiversity store more carbon and deliver more ecosystem services than less biodiverse systems? And if so, what can we do to take advantage of this?

These questions are relevant to the Convention on Biological Diversity (CBD) and its 2020 targets. Answers will also inform the UN programme on Reducing Emissions from Deforestation & Forest Degradation (REDD+) which aims to enhance forest carbon pools by supporting the conservation, sustainable management and restoration of forests. ROBIN is particularly relevant to REDD+ co-benefits. ROBIN considers the impacts of land-use change in multi-functional landscapes in relation to IPCC Scenarios and is relevant to the achievement of the UN's Sustainable Development Goals.

ROBIN used data from field studies, remote sensing, land use and ecosystem modelling and participatory approaches. We worked at multiple scales (local, national - Mexico, Brazil, Bolivia and Guyana - and regional) using a common indicator framework. We used scenarios combining possible climate and land use futures with options representing how people and governments may respond. We improved two dynamic vegetation models (LPJmL-FIT and JULES) by including biodiversity more realistically. We tested the scenarios in the models to see how forest productivity, crop yield, carbon storage and other ecosystem services may be affected by future climate and land use change. We worked with a broad range of local people (farmers, foresters, government authorities, etc.) in three case study areas and used Fuzzy Cognitive Mapping to explore stakeholder options relating to land management, forest biodiversity, climate change and local needs.

ROBIN provided research evidence and products to support the following key messages:
• in relation to the role of biodiversity: biodiversity matters - biodiverse forests store more carbon and are more resilient to climate change than less biodiverse forests.
• in relation to monitoring: an indicator of ecosystem integrity can be calculated for data rich and data poor areas and has been used as a basis for a Mexican biodiversity monitoring programme.
• in relation to policies and management options: managing logged and secondary forests for biodiversity will help increase carbon storage and resilience.
• in relation to ecosystem functions: functional diversity and ecosystem integrity are linked to carbon storage, biodiversity and other forest benefits and can be easily monitored as part of a systematic approach to environmental management.
• in relation to climate change mitigation and other ecosystem services: spatial trade-offs among services change across spatial scales and contexts and ROBIN developed two decision-support tools to help assess options that are relevant to local or national situations.
• in relation to decoupling economic growth from environmental degradation: there may be creative opportunities for win-wins across bundles of services but the extent to which these are constrained by biophysical rather than socio-economic factors must be taken into account.
• in relation to benefits and human well-being associated: payments for ecosystem services and REDD+ schemes should be linked to agricultural policies targeted at smallholders.

Our spatial data warehouse for project data and ROBIN products is at www.conabio.gob.mx/robin
More information can be found on our web-site at www.robinproject.info

Summary description of project context and objectives

The description of this summary are included in the attached PDF as this section includes figures.

Description of main S & T results/foregrounds

The description of the main results are included in the attached PDF as this section includes figures.

Potential impact and main dissemination activities and exploitation results

The description of the potential impact and main dissemination activities are included in the attached PDF as it includes figures.

Address of project public website and relevant contact details

http://robinproject.info/home; www.robinproject.info

4.2 Use and dissemination of foreground

Section A (public)

Publications

	LIST OF SCIENTIFIC PUBLICATIONS, STARTING WITH THE MOST IMPORTANT ONES									
No.	Title / DOI	Main author	Title of the periodical or the series	Number, date or frequency	Publisher	Place of publication	Date of publication	Relevant pages	Is open access provided to this publication ?	Type
1	Diversity enhances carbon storage in tropical forests 10.1111/geb.1 2364	L. Poorter, et al	Global Ecology and Biogeography	Vol. 24/Issue 11	Blackwell Publishing	United Kingdom	01/11/2015	1314-1328		Peer reviewed
2	Leaf and stem economics spectra drive diversity of functional plant traits in a dynamic global vegetation model 10.1111/gcb.1 2870	Boris Sakschews ki , Werner von Bloh , Alice B oit , Anja Rammig , Jens Kattge , Lourens Poo rter , Josep Pe ñuelas , Kirste n Thonicke	Global Change Biology	Vol. 21/Issue 7	Blackwell Publishing	United Kingdom	01/07/2015	2711-2725		Peer reviewed
3	Ecosystem services research in Latin America: The state of the art 10.1016/j.eco ser.2012.09.006	Patricia B alvaner a, et al .	Ecosystem Services	Vol. 2	Elsevier	Netherlands	01/12/2012	56-70		Peer reviewed
4	The potential of secondary forests 10.1126/scien ce.348.6235.642-c	F. Bongers , R. Chazdon , L. Poorter , M . Pena-Claros	Science	Vol. 348/I ssu e 6235	American Association for the Advancement of Science	United States	08/05/2015	642-643		Peer reviewed
5	Effects of disturbance intensity on species and functional diversity in a tropical forest	Geovana Ca rreño- Roca	Journal of Ecology	Vol. 100/I ssu e 6	Blackwell Publishing	United Kingdom	01/11/2012	1453-1463		Peer reviewed

	10.1111/j.136 5-2745.2012.02015.x	bado , Mar ielos Peña -Clar os , Frans Bongers , Alfredo A larcón , J uan-Car los Licona , Lourens Po orter								
6	Does functional trait diversity predict above-ground biomass and productivity of tropical forests? Testing three alternative hypotheses 10.1111/1365- 2745.12346	Bryan Fine gan , Marielos Peña-Cla ros , Alexandr e de Oliveira , Na taly Ascarrun z , M. Syndo nia Bret-Har te , Geovana Carreño- Ro cabado , F ernando Ca sanove s , Sandra Díaz , Paul Eguigure n Velepuch a , Fernando Fernande z , Juan Carlos L icona , Leda Lorenzo , Be atriz Salgado Negret , Ma rcel Vaz , Lourens P oorter	Journal of Ecology	Vol. 103/I ssu e 1	Blackwell Publishing	United Kingdom	01/01/2015	191-201		Peer revie wed
7	Global human appropriation of net primary production doubled in the 20th century 10.1073/pnas. 1211349110	F. Krausman n , K.-H. Erb , S. Gingrich , H. Haberl , A. Bondeau , V. Gaube , C. Lauk , C. Plutzar , T. D. Searching er	Proceedings of the National Academy of S ciences of the United States	Vol. 110/I ssu e 25	National Academy of Sciences	United States	18/06/2013	10324-103 29		Peer revie wed
8	The Tropical managed Forests Observatory	P. Sist, et al.	Applied Vegetation Science	Vol. 18/Is	Wiley-Blackwe ll	United States	01/01/2015	171-174		Peer revie

	: a research network addressing the future of tropical logged forests 10.1111/avsc. 12125			sue 1						wed
9	Explaining biomass growth of tropical ca nopy trees: the importance of sapwood 10.1007/s0044 2-015-3220-y	Masha T. van der Sande , Pieter A. Zuidema , Frank Sterck	Oecologia	Vol. 177/I ssu e 4	Springer Verlag	Germany	01/04/2015	1145-1155		Peer revie wed
10	Long-term decline of the Amazon carbon s ink 10.1038/natur e14283	R. J. W. B rienen, et al.	Nature	Vol. 519/I ssu e 7543	Nature Publishing Gr oup	United Kingdom	18/03/2015	344-348		Peer revie wed
11	Forest edge burning in the Brazilian Ama zon promoted by escaping fires from mana ged pastures 10.1002/2015J G002914	Ana Cano-Cre spo , Paulo J. C. Oliveira , Alice Boit , M anoel Cardoso , Kirsten T honicke	Journal of Geophysical Research - Biogeo scienc es	Vol. 120/I ssu e 10	American Geophy sical Union		01/10/2015	2095-2107		Peer revie wed
12	Monitoring forest cover loss using multiple data streams, a case study of a tropical dry forest in Bolivia 10.1016/j.isp rsjprs.2015.03.015	Loïc Paul Dutrieux , Jan Verbesse lt , Lammert Kooistra , Mar tin Herold	ISPRS Journal of Photogrammetr y and Remote Sensing	Vol. 107	Elsevier	Netherlands	01/09/2015	112-125		Peer revie wed
13	A hydro-economi c model for the asse ssment of climate change impacts and ada ptation in irrigated agriculture 10.1016/j.eco lecon.2015.09.017	Paloma Est eve , Cons uelo Varela-O rtega , Irene Blanco-Gutiér rez , Thomas E. Downing	Ecological Economics	Vol. 120	Elsevier	Netherlands	01/12/2015	49-58		Peer revie wed
14	Hyperdominanc e in Amazonian forest carbon cycling 10.1038/ncomm s7857	Sophie Fauset et al.	Nature Communication s	Vol. 6	Nature Publishing Gr oup	United Kingdom	28/04/2015	6857		Peer revie wed
15	Payment for Ecosystem Services (PES) in Latin America: Analysing the performance of 40 case studies 10.1016/j.eco ser.2015.11.010	Nelson Grima , Simron J. Singh , Ba rbara Smet schka , Lisa Ringhofe r	Ecosystem Services	Vol. 17	Elsevier	Netherlands	01/02/2016	24-32		Peer revie wed

16	Biomass is the main driver of changes in ecosystem process rates during tropical forest succession 10.1890/14-04 72.1	Madelon Lohbeck , Lourens Poorter , Miguel Martínez -Ramos , Frans Bongers	Ecology	Vol. 96/Issue 5	Ecological Society of America	United States	01/05/2015	1242-1252		Peer reviewed
17	Influence of solar zenith angle on the enhanced vegetation index of a Guyanese rainforest 10.1080/21507 04X.2015.1089362	Benjamin Brede , Juha Suomalainen , Harm Bartholom eus , Martin Herold	International Journal for Remote Sensing	Vol. 6/Issue 12	Taylor and Francis Ltd.		02/12/2015	972-981		Peer reviewed
18	Reconstructin g land use history from Landsat time-series 10.1016/j.jag .2015.11.018	Loïc P. Du trieux , Catarina C. Jakovac , Siti H. Latifah , Lammert Kooistra	International Journal of Applied Earth Observation and Geoinformati on	Vol. 47	Elsevier		01/05/2016	112-124		Peer reviewed
19	Using spatial context to improve early detection of deforestation from Landsat time series 10.1016/j.rse .2015.11.006	Eliakim Hamunyel a , Jan Verbesse lt , Martin Herold	Remote Sensing of Environment	Vol. 172	Elsevier Inc.	United States	01/01/2016	126-138		Peer reviewed
20	Land-use intensificat ion effects on functional properties in tropical plant comm unities 10.1890/14-03 40.1	Geovana Carreño- Rocabado , Marielos Peña -Clar os , Frans Bongers , Sandra Díaz , Fabien Quétier , José Chuviña , Lourens Poorter	Ecological Appplications	Vol. 25	Ecological Society of America	United States	21/05/2015	1505210836 05001		Peer reviewed
21	MAD-MEX: Automatic Wall-to-Wall Land Cover Monitoring for the Mexican REDD-MRV Program Using All Landsat Data 10.3390/rs605 3923	Steffen Gebhardt , Thilo Wehrmann , Miguel Ruiz , Pedro Maeda , Jesse Bishop , Matthias Sc hramm , Rene Kopeinig , O liver Cartus ,	Remote Sensing	Vol. 6/Issue 5	MDPI AG	Switzerland	01/05/2014	3923-3943	Yes	Peer reviewed

	Josef Kell ndorf er , Rainer Ressl , Lucio Santos , Michael Sc hmidt								
Linking Bayesian Belief Networks and GIS to assess the Ecosystem Integrity in the Brazilian Amazon.	Verweij, P eter; Simoes, M. , Alves, A., Ferraz, R., Cormont, A.	In: Ames, D.P., Quinn, N.W.T., Rizzoli, A.E. (Eds.), Proceedings of the 7th Inte rnational Congress on Environmental Modelling and Software				15/06/2014	1-8	Yes	Article
Biodiverse carbon capture.	Equihua, M., Parr, T. and Ascarrunz , N.	International Innovation (magazine)		International Innova tion Research Media Ltd.	Bristol, United King dom	02/07/2012	83-85	Yes	Article
Integrated modelling of land use change impacts on ecosystem services in Latin A merica	Thonicke, Kirsten; Alice Boit, Michiel van Eupen, Kasper Kok, Anouk C ormont, Marta Pérez-So ba, Laurence Jones, Mel anie Kolb, Sandra Qu ijas-F onseca, Patty Balva ner a	IMPACTS WORLD 2013 : International Conference on Climate Change Effects - C ONFERENCE PROCEEDINGS		Potsdam Institute for Climate Impact Res earch	Potsdam (Germany)	01/09/2013	182-189	Yes	Conference
Performance of the Enhanced Vegetation I ndex to Detect Inner-annual Dry Season a nd Drought Impacts on Amazon Forest Canopies	Brede, B., Verbessel t, J., Dutrieux, L., and Herold, M.: Performa nce of the Enhanced Vegetati on Index to Detect Inn er-annual Dry Season and Drought Im pacts on A mazon Forest Canopies	36th Internationa l Symposium on Remote Sensing of Environment		International Archives of the Photogrammet ry Remote Sensing and Spatial Informat ion Sciences	Int. Arch. Photogram m. Remote Sens. Spat ial Inf. Sci., XL-7/ W3, 337-344, 2015	29/04/2015	337-344	Yes	Conference

Linking Bayesian Belief Networks and GIS to assess the Ecosystem Integrity in the Brazilian Amazon	Peter Verweij, Margareth Simoes, Andrei Alves, Rodrigo Ferraz, Anouk Cormont	Proceedings of the 7th International Congress on Environmental Modelling and Software		The International Environmental Modelling & Software Society		17/07/2014	1-8	Yes	Conference
Integridad Ecológica para la Gestión de la Sustentabilidad Ambiental frente al Cambio Climático	Miguel Equihua Zamora	4to Coloquio Internacional Cambio Climático INECOL-2014		INSTITUTO DE ECOLOGÍA A.C. (CONACYT)		01/07/2014	6-7		Conference
Framework for multi-scale integrated impact analyses of climate change mitigation options, in:	M. Pérez-Soba, T. Parr, L. Roupioz, M. Winograd , M.P. Claros, C. Varela-Ortega, N. Ascarrunz, P. Balvanera, P. Bholanath , M. Equihua, L.G. Martorano, L. Jones, M. Maass, K. Thonicke .	Impacts World 2013, International Conference on Climate Change Effects, Potsdam Institute for Climate Impact Research, Potsdam, Germany,		Potsdam Institute for Climate Impact Research		01/09/2013	182-189	Yes	Conference
Caracterizaçã o das unidades da paisagem em ambiente de floresta tropical por meio de imagens-fraçã o MESMA	Gustavo Bayma-Silva; Lucia na Spinelli-Araujo; Sandra Furlan Nogueira ;Janice Freitas Leivas; Yosio Edemir Shimabukuro Lucieta Guerreiro Martorano3	Anais XVII Simpósio Brasileiro de Sensoriamento Remoto - SBSR, João Pessoa-PB, Brasil		XVII SBSR SECRETARIAT São José dos Campos - SP Brazil		10/06/2015	1216-1223	Yes	Conference
Margareth Simões, Rodrigo Ferraz, Peter Verweij, Miguel Equihual, Octavio Maqueo, Andrei Alves	Margareth Simões, Rodrigo Ferraz, Peter Verweij, Miguel Equihual, Octavio	4th International conference on Earth Science & Climate Change	Journal of Earth Science and Climate Chnage	OMICS International	18/06/2015	36	Yes	Conference

		Maqueo, Andrei Alves							
Climate Change Mitigation in Latin America:A Mapping of Current Policies, Plans andPrograms	Lisa Ringhofer, Simron Jit Singh, Barbara Smetschka	Climate Change Mitigation in Latin America: A Mapping of Current Policies, Plans and Programs	Social Ecology Working Paper volume 143 (ISSN 1726-3816)	IFF - Faculty for Interdisciplinary Studies (Klagenfurt, Graz, Vienna)		10/07/2013		Yes	Monogram
Social Multi-Criteri a Evaluation (SMCE)in Theory and Practice:Introducing the software OPTamos	Singh, Simron J., Barbara Smetschka , Nelson Grima, Lisa Ringhofer , Panos Petridis , and Katharina Biely	Social Multi-Criteri a Evaluation (SMCE) in Theory and Practice: Introducing the software OPTamos	Social Ecology Working Paper 160 (ISSN 1726-3816)	IFF - Faculty for Interdisciplinary Studies (Klagenfurt, Graz, Vienna)	Vienna	01/01/2016		Yes	Monogram
Estimativa do potencial erosivo das chuvas em municípios no entorno a Flona Tapajós, Amazônia	A. Barbosa, L. Martoran o, D. Costa, L. Lisboa, A. Pereira Naci and M. Pimentel	Artigo em anais de congresso (ALICE)	48860	Embrapa Amazônia Oriental - Artigo em anais de congresso (ALICE)	UEPA-ISSN 2316-7637	09/01/2014		Yes	Monogram
Linking land-use intensificati on, plant communities and ecossytem processes in lowland Bolivia	Geovana Carreño- Roca bado			Wageningen University	PHD thesis, Wageningen University, Wageningen, NL (2013)	13/05/2013			Thesis

LIST OF DISSEMINATION ACTIVITIES

No.	Type of activities	Main Leader	Title	Date	Place	Type of audience	Size of audience	Countries addressed
1	Oral presentation to a wider public	NATURAL ENVIRONMENT RESEARCH COUNCIL	FOREST LANDSCAPES: SOLUTIONS FOR CLIMATE CHANGE MITIGATION	21/10/2015	European Parliament	Scientific community (higher education, Research) - Industry - Policy makers	30	Europe, Brazil, Mexico
2	Organisation of Conference	NATURAL ENVIRONMENT RESEARCH COUNCIL	Realising the potential of nature and people in the implementation of REDD+ and its safeguards	01/12/2015	COP21 climate change talks in Paris http://ec.europa.eu/clima/events/0107/calendar_en.htm#schedul	Scientific community (higher education, Research) - Policy makers	40	Europe, Latin America, Meso America
3	Exhibitions	NATURAL ENVIRONMENT RESEARCH COUNCIL	ROBIN showcased at European Green Week 2015	03/06/2015	Green Week Side Event (Brussels, Belgium) http://robinproject.info/home/robin-showcased-at-european-	Scientific community (higher education, Research) - Policy makers	3000	Europe, Latin America, Meso America
4	Flyers	NATURAL ENVIRONMENT RESEARCH COUNCIL	1. The Role of Biodiversity in Climate Change Mitigation (ROBIN): a whole system approach	25/09/2015	http://robinproject.info/home/wp-content/uploads/2015/10/Factsheet-01-Overview.pdf	Scientific community (higher education, Research) - Civil society - Policy makers		Europe, Latin America, Meso America
5	Flyers	WAGENINGEN UNIVERSITEIT	2. Biodiversity has a positive effect on carbon stocks and carbon sequestration	25/09/2015	http://robinproject.info/home/wp-content/uploads/2015/10/Factsheet-02-Biodiv-positive-C-effect.pdf	Scientific community (higher education, Research) - Civil society - Policy makers		Europe, Latin America, Meso America
6	Flyers	Instituto de Ecología, A.C.	3. MEASURES OF ECOSYSTEM INTEGRITY PROVIDE A HEALTH CHECK ON HUMAN LAND USE	25/09/2015	http://robinproject.info/home/wp-content/uploads/2015/10/Factsheet-03-EI-land-use.pdf	Scientific community (higher education, Research) - Civil society - Policy makers		Europe, Latin America, Meso America
7	Flyers	UNIVERSIDAD NACIONAL AUTONOMA DE ME	4. modelling ecosystem services for policy: carbon stocks an	25/09/2015	http://robinproject.info/home/wp-content/uploads/2	Scientific community (higher education, Research) - Civ		Europe, Latin America, Meso America

		XICO	d carbon sequestration		015/10/Factsheet-04-modelling-carbon.pdf	il society - Policy makers		
8	Flyers	UNIVERSITAET KLAGENFURT	5. PES and REDD+ schemes should be linked to agricultural policies addressed at smallholde	25/09/2015	http://robinproject.info/home/wp-content/uploads/2015/10/Factsheet-05-PES-REDD-smallholders.pdf	Scientific community (higher education, Research) - Civil society - Policy makers		Europe, Latin America, Meso America
9	Flyers	POTSDAM INSTITUT FUER KLIMAFOLGENFORSCHUNG	6. Model indicates Biodiversity has a direct effect on carbon stocks and forest biomass resilience	25/09/2015	http://robinproject.info/home/products/factsheets/	Scientific community (higher education, Research) - Civil society - Policy makers		Europe, Latin America, Meso America
10	Flyers	UNIVERSIDAD NACIONAL AUTONOMA DE MEXICO	7. Ecosystem integrity assessment serves as a common approach for multi-sectoral public policy in Latin America	25/09/2015	http://robinproject.info/home/wp-content/uploads/2015/10/Factsheet-07-EI-assessment.pdf	Scientific community (higher education, Research) - Civil society - Policy makers		Europe, Latin America, Meso America
11	Flyers	UNIVERSITAET KLAGENFURT	8. OPTamos – a decision support tool for natural resource and land use management	25/09/2015	http://robinproject.info/home/wp-content/uploads/2015/10/Factsheet-08-OPTamos.pdf	Scientific community (higher education, Research) - Civil society - Policy makers		Europe, Latin America, Meso America
12	Flyers	NATURAL ENVIRONMENT RESEARCH COUNCIL	9. A decision support tool for addressing climate change and biodiversity policy options in Latin America	25/09/2015	http://robinproject.info/home/wp-content/uploads/2015/10/Factsheet-09-QUICKScan.pdf	Scientific community (higher education, Research) - Civil society - Policy makers		Europe, Latin America, Meso America
13	Flyers	Instituto de Ecología, A.C.	10. Ecosystems with lower integrity store less carbon and provide fewer ecosystem services	25/09/2015	http://robinproject.info/home/wp-content/uploads/2015/10/Factsheet-10-EI-C-storage-ES.pdf	Scientific community (higher education, Research) - Civil society - Policy makers		Europe, Latin America, Meso America
14	Flyers	WAGENINGEN UNIVERSITEIT	11. The potential of human-impacted forests	25/09/2015	http://robinproject.info/home/products/factsheets/	Scientific community (higher education, Research) - Civil society - Policy makers		Europe, Latin America, Meso America

15	Flyers	UNIVERSIDAD NACIONAL AUTONOMA DE MEXICO	12. TOWARDS A BETTER SOCIOENVIRONMENTAL RESPONSE TO CLIMATE CHANGE by UNDERSTANDING MULTIPLE STAKEHOLDERS' PERSPECTIVES	25/09/2015	http://robinproject.info/home/wp-content/uploads/2015/10/Factsheet-12-Using-stakeholder-perspectives	Scientific community (higher education, Research) - Civil society - Policy makers		Europe, Latin America, Meso America
16	Flyers	UNIVERSIDAD POLITECNICA DE MADRID	13. ENVIRONMENTAL POLICIES SHOULD BE INTEGRATED WITH AGRICULTURAL AND DEVELOPMENT POLICY TO BE SUCCESSFUL	27/11/2015	http://robinproject.info/home/wp-content/uploads/2015/12/Factsheet-13.pdf	Scientific community (higher education, Research) - Civil society - Policy makers		Europe, Latin America, Meso America
17	Videos	NATURAL ENVIRONMENT RESEARCH COUNCIL	Does biodiversity weaken the effects of climate change?	26/11/2015	http://www.ceh.ac.uk/news-and-media/blogs/does-biodiversity-weaken-effects-climate-change	Civil society - Policy makers - Medias		Europe, Latin America, Meso America
18	Oral presentation to a wider public	EMPRESA BRASILEIRA DE PESQUISA AGROPECUARIA	Summary of the achievements of the ROBIN Project and EMBRAPA	19/11/2015	BRAZIL-EU INTERNATIONAL SEMINAR ON NATURE BASED SOLUTION AND SUSTAINABLE URBANIZATION	Scientific community (higher education, Research) - Industry - Policy makers		Europe, Brazil
19	Exhibitions	NATURAL ENVIRONMENT RESEARCH COUNCIL	DG ENV: Mapping and assessment of ecosystems and their services	15/12/2015	http://www.beescommunity.be/xmas/ (Brussels, Belgium)	Scientific community (higher education, Research) - Civil society - Policy makers		Europe, Latin America, Meso America
20	Videos	UNIVERSITAET KLAGENFURT	Demonstration of OPTamos Decision support tool	10/10/2015	https://vimeo.com/143244176	Scientific community (higher education, Research) - Industry - Civil society - Policy makers - Medias		Europe, Latin America, Meso America

21	Organisation of Workshops	EMPRESA BRASILEIRA DE PESQUISA AGROPECUARIA	III COGNITIVE PERCEPTION WORKSHOP "THE BIODIVERSITY ROLE IN CLIMATE CHANGE MITIGATION"	03/08/2015	Belem. Brazil	Scientific community (higher education, Research) - Civil society - Policy makers		Europe, Latin America,
22	Organisation of Workshops	UNIVERSIDAD POLITECNICA DE MADRID	¡Thinking of the future! The ROBIN workshop on scenario development and Fuzzy Cognitive Maps of the future	21/11/2014	Villa Purification, Jalisco, Western Mexico	Scientific community (higher education, Research)		Europe, Latin America, Meso America
23	Organisation of Workshops	UNIVERSIDAD NACIONAL AUTONOMA DE MEXICO	Environmental Services in the Chamela watershed in western Mexico: the fourth ROBIN workshop	05/08/2014	Villa Purification and La Huerta region (Mexico)	Scientific community (higher education, Research) - Policy makers		Europe, Latin America, Meso America
24	Oral presentation to a scientific event	UNIVERSIDAD POLITECNICA DE MADRID	A bio-economic modeling approach applied to lowland Bolivia	12/09/2015	7th ESP Conference in Costa Rica,	Scientific community (higher education, Research)		Europe, Latin America,
25	Oral presentation to a scientific event	NATURAL ENVIRONMENT RESEARCH COUNCIL	Multi-functional landscapes: there certainly is more than one way to skin a cat.	19/03/2014	Global Land Project (GLP) Conference in Berlin	Scientific community (higher education, Research)		Europe, Latin America, Meso America
26	Organisation of Workshops	NATURAL ENVIRONMENT RESEARCH COUNCIL	Joint ROBIN and AMAZALERT meeting	06/10/2014	Belem and Alter-do-Chao (Brazil)	Scientific community (higher education, Research) - Policy makers		Europe, Latin America, Meso America
27	Oral presentation to a scientific event	WAGENINGEN UNIVERSITEIT	Exploring causes, risks, and consequences for ecosystem services if tipping points in Latin American forests ? the role of biodiversity	07/07/2015	Our Common Future Under Climate Change -Paris, France: http://cfcc.event.y-congress.com/ScientificPr	Scientific community (higher education, Research)	30	Europe, Latin America, Meso America
28	Oral presentation to a scientific event	EMPRESA BRASILEIRA DE PESQUISA AGROPECUARIA	Impacts of Biodiversity Loss in the Carbon Stock and Evapotranspiration Flu	08/07/2015	Our Common Future Under Climate Change -Paris, France: http://cfcc.eve	Scientific community (higher education, Research)	30	Europe, Latin America, Meso America

			xes Regulation in Br azilian Amazon		nt.y-congress.c om/ScientificPr			
29	Web sites/Appli cations	NATURAL EN VIRONMENT RESEARCH C OUNCIL	ROBIN project w ebsite	01/01/2011	www.robinprojec t.info	Scientific comm unity (higher educat ion, Research) - Ind ustry - Civil society - Policy makers - Medias		global
30	Films	NATURAL EN VIRONMENT RESEARCH C OUNCIL	Project Slideshows o n Biodiversity	03/09/2015	ROBIN project w ebsite: http://robin project.info/ho me/gallery/	Scientific comm unity (higher educat ion, Research) - Civ il society - Policy makers - Medias		Europe, Latin A merica, Meso Am erica
31	Organisation of Workshops	UNIVERSIDAD NACIONAL AUTO NOMA DE ME XICO	Scientific Cooperati on on Climate C hange in the Pacific Alliance: Biodivers ity Monitoring proje ct planning	10/11/2014	Sevilla Palace Hotel, Mexico City	Scientific comm unity (higher educat ion, Research) - Pol icy makers	28	Latin American countries; Peru, Mexico, Chile and Colombia
32	Organisation of Workshops	Instituto de Ecologí a, A.C.	State of the art on Biodiversity Mo nitoring for the Pac ific Alliance. Coope ration on Climate Change in the Pac ific Alliance: Biodi versity Monitoring	12/10/2015	Department of F oreign Affairs. Sant iago, Chile	Scientific comm unity (higher educat ion, Research) - Pol icy makers	10	Chile
33	Organisation of Workshops	Instituto de Ecologí a, A.C.	State of the art on Biodiversity Mo nitoring for the Pac ific Alliance.. Scie ntific Cooperation o n Climate Change in the Pacific Alliance: Biodiversity Monit oring	10/07/2015	San Carlos Palace, Chancellery, Bog otá, Colombia	Scientific comm unity (higher educat ion, Research) - Pol icy makers	25	Colombia
34	Organisation of Workshops	Instituto de Ecologí a, A.C.	State of the art on Biodiversity Mo nitoring for the Pac ific Alliance.. Scie ntific Cooperation o n Climate Change in the Pacific Alliance: Biodiversity Monit	24/08/2015	Department of F oreign Affairs. Lima, Peru	Scientific comm unity (higher educat ion, Research) - Pol icy makers	25	Peru

			oring					
35	Oral presentation to a scientific event	UNIVERSIDAD NACIONAL AUTONOMA DE MEXICO	Present and future tradeoffs between biodiversity, ecosystem services and human well-being in tropical Latin America	12/11/2015	ESP World Conference, Stellenbosch, South Africa (www.espconference.org/espconference2015/wi)	Scientific community (higher education, Research)	40	Latin America, Meso America
36	Posters	EMPRESA BRASILEIRA DE PESQUISA AGROPECUARIA	Land use changes scenarios and future environmental services provision in the Brazilian Amazon	12/11/2015	ESP World Conference, Stellenbosch, South Africa (www.espconference.org/espconference2015/wi)	Scientific community (higher education, Research)	50	Latin America, Meso America
37	Posters	UNIVERSIDAD POLITECNICA DE MADRID	Quantifying the risk of deforestation in Latin America and the Caribbean.	14/04/2015	EGU General Assembly http://www.egu2015.eu/EGU2015_NH_Programme_Group_Programme.pdf	Scientific community (higher education, Research)	100	Latin America
38	Organisation of Workshops	MINISTERIO DEL MEDIO AMBIENTE Y RECURSOS NATURALES	Endorse ecosystem integrity as a tool for experimental ecosystem accounting	30/04/2015	UN headquarters NYC	Scientific community (higher education, Research) - Policy makers		Ineternational
39	Oral presentation to a scientific event	EMPRESA BRASILEIRA DE PESQUISA AGROPECUARIA	Caracterização das unidades da paisagem em ambiente de floresta tropical por meio de imagens-fração MESMA	29/04/2015	João Pessoa-PB, Brasil, http://www.dsr.inpe.br/sbsr2015/files/p0225.pdf	Scientific community (higher education, Research)		Latin and Meso America
40	Posters	WAGENINGEN UNIVERSITEIT	Impact of soybean expansion on Water Footprint in the Amazon under climate change scenarios	29/05/2015	World Water Congress XV (Edinburgh)	Scientific community (higher education, Research)	50	Europe, Latin America, Meso America
41	Oral presentation to a scientific event	EMPRESA BRASILEIRA DE PESQUISA AGROPECUARIA	Dinâmica pluvial e taxas evapotranspiratórias como indicativo de trocas hídricas em Belterra, Bacia do Tapajós	15/06/2015	III Seminar Agrohidro Network Corumba-Brazil	Scientific community (higher education, Research)		Latin and Meso America
42	Oral presentation to	WAGENINGEN	"QUICKScan: a p	09/07/2015	International A	Scientific comm		Europe, Latin A

	a scientific event	UNIVERSITEIT	articipatory approach to map ecosystem services and develop hands-on knowledge		ssociation for Landscape Ecology's 2015 World Congress (Portland, Oregon USA)	unity (higher education, Research)		merica, Meso America
43	Oral presentation to a scientific event	POTSDAM INSTITUT FUER KLIMAFOLGENFORSCHUNG	LPJmL-FIT approach on how to incorporate biodiversity in dynamic vegetation models	25/09/2015	Ecology at the interface (EEF) conference (Rome; Italy)	Scientific community (higher education, Research)	80	Europe, Latin America, Meso America
44	Organisation of Workshops	MINISTERIO DEL MEDIO AMBIENTE Y RECURSOS NATURALES	Robin and National Forestry Commission, National (CONAFOR),	12/10/2015	Mexican governmental institutions	Policy makers	20	Latin and Meso America
45	Oral presentation to a scientific event	EMPRESA BRASILEIRA DE PESQUISA AGROPECUARIA	4th Symposium of Studies and Researches in Environmental Science in the Amazon	20/11/2015	Belém-Pará-Brazil	Scientific community (higher education, Research)		Brazil

Section B (Confidential or public: confidential information marked clearly)

LIST OF APPLICATIONS FOR PATENTS, TRADEMARKS, REGISTERED DESIGNS,UTILITY MODELS, ETC.					
Type of IP Rights	Confidential	Foreseen embargo date dd/mm/yyyy	Application reference(s) (e.g. EP123456)	Subject or title of application	Applicant(s) (as on the application)

OVERVIEW TABLE WITH EXPLOITABLE FOREGROUND								
Type of Exploitable Foreground	Description of Exploitable Foreground	Confidential	Foreseen embargo date dd/mm/yyyy	Exploitable product(s) or measure(s)	Sector(s) of application	Timetable for commercial use or any other use	Patents or other IPR exploitation (licences)	Owner and Other Beneficiary(s) involved

ADDITIONAL TEMPLATE B2: OVERVIEW TABLE WITH EXPLOITABLE FOREGROUND	
Description of Exploitable Foreground	Explain of the Exploitable Foreground

4.3 Report on societal implications

B. Ethics

1. Did your project undergo an Ethics Review (and/or Screening)?	No
If Yes: have you described the progress of compliance with the relevant Ethics Review/Screening Requirements in the frame of the periodic/final reports?	

2. Please indicate whether your project involved any of the following issues :

RESEARCH ON HUMANS

Did the project involve children?	No
Did the project involve patients?	No
Did the project involve persons not able to consent?	No
Did the project involve adult healthy volunteers?	No
Did the project involve Human genetic material?	No
Did the project involve Human biological samples?	No
Did the project involve Human data collection?	No

RESEARCH ON HUMAN EMBRYO/FOETUS

Did the project involve Human Embryos?	No
Did the project involve Human Foetal Tissue / Cells?	No
Did the project involve Human Embryonic Stem Cells (hESCs)?	No
Did the project on human Embryonic Stem Cells involve cells in culture?	No
Did the project on human Embryonic Stem Cells involve the derivation of cells from Embryos?	No

PRIVACY

Did the project involve processing of genetic information or personal data (eg. health, sexual lifestyle, ethnicity, political opinion, religious or philosophical conviction)?	No
Did the project involve tracking the location or observation of people?	No

RESEARCH ON ANIMALS

Did the project involve research on animals?	No
Were those animals transgenic small laboratory animals?	No
Were those animals transgenic farm animals?	No
Were those animals cloned farm animals?	No
Were those animals non-human primates?	No

RESEARCH INVOLVING DEVELOPING COUNTRIES

Did the project involve the use of local resources (genetic, animal, plant etc)?	No
Was the project of benefit to local community (capacity building, access to healthcare, education etc)?	Yes

DUAL USE

Research having direct military use	No
Research having potential for terrorist abuse	No

C. Workforce Statistics

3. Workforce statistics for the project: Please indicate in the table below the number of people who worked on the project (on a headcount basis).

Type of Position	Number of Women	Number of Men
Scientific Coordinator	1	1
Work package leaders	5	5
Experienced researchers (i.e. PhD holders)	40	37
PhD student	12	8
Other	5	8

4. How many additional researchers (in companies and universities) were recruited specifically for this project?	0
Of which, indicate the number of men:	0

D. Gender Aspects

5. Did you carry out specific Gender Equality Actions under the project ?	No

6. Which of the following actions did you carry out and how effective were they?	
Design and implement an equal opportunity policy	Not Applicable
Set targets to achieve a gender balance in the workforce	Not Applicable
Organise conferences and workshops on gender	Not Applicable
Actions to improve work-life balance	Not Applicable
Other:	

7. Was there a gender dimension associated with the research content - i.e. wherever people were the focus of the research as, for example, consumers, users, patients or in trials, was the issue of gender considered and addressed?	No
If yes, please specify:	

E. Synergies with Science Education

8. Did your project involve working with students and/or school pupils (e.g. open days, participation in science festivals and events, prizes/competitions or joint projects)?	No
If yes, please specify:	

9. Did the project generate any science education material (e.g. kits, websites, explanatory booklets, DVDs)?	Yes
If yes, please specify:	The project has produced a number of fact sheets that summarises key messages from the project, these were used to disseminate outcomes to end-users and decision makers. Also we have produced an animation on the use of the OPTamos tool (a decision support tool). This is in addition to slide shows that describe the importance of biodiversity

F. Interdisciplinarity

10. Which disciplines (see list below) are involved in your project?	
Main discipline:	
Associated discipline:	5.4 Other social sciences [anthropology (social and cultural) and ethnology, demography,

	geography (human, economic and social), town and country planning, management, law, linguistics, political sciences, sociology, organisation and methods, miscellaneous social sciences and interdisciplinary , methodological and historical S1T activities relating to subjects in this group. Physical anthropology, physical geography and psychophysiology should normally be classified with the natural sciences].
Associated discipline:	4.1 Agriculture, forestry, fisheries and allied sciences (agronomy, animal husbandry, fisheries, forestry, horticulture, other allied subjects)

G. Engaging with Civil society and policy makers

11a. Did your project engage with societal actors beyond the research community? (if 'No', go to Question 14)	Yes
11b. If yes, did you engage with citizens (citizens' panels / juries) or organised civil society (NGOs, patients' groups etc.)?	Yes, in communicating /disseminating / using the results of the project
11c. In doing so, did your project involve actors whose role is mainly to organise the dialogue with citizens and organised civil society (e.g. professional mediator; communication company, science museums)?	No
12. Did you engage with government / public bodies or policy makers (including international organisations)	Yes, in communicating /disseminating / using the results of the project
13a. Will the project generate outputs (expertise or scientific advice) which could be used by policy makers?	Yes - as a primary objective (please indicate areas below multiple answers possible)
13b. If Yes, in which fields?	
Agriculture	Yes
Audiovisual and Media	No
Budget	No
Competition	No
Consumers	No
Culture	No
Customs	No
Development Economic and Monetary Affairs	No
Education, Training, Youth	No
Employment and Social Affairs	No
Energy	No
Enlargement	No

Enterprise	No
Environment	Yes
External Relations	No
External Trade	No
Fisheries and Maritime Affairs	No
Food Safety	No
Foreign and Security Policy	No
Fraud	No
Humanitarian aid	No
Human rightsd	No
Information Society	No
Institutional affairs	No
Internal Market	No
Justice, freedom and security	No
Public Health	No
Regional Policy	Yes
Research and Innovation	Yes
Space	No
Taxation	No
Transport	No
13c. If Yes, at which level?	International level

H. Use and dissemination

14. How many Articles were published/accepted for publication in peer-reviewed journals?	34
To how many of these is open access provided?	12
How many of these are published in open access journals?	12
How many of these are published in open repositories?	12
To how many of these is open access not provided?	0
Please check all applicable reasons for not providing open access:	
publisher's licensing agreement would not permit publishing in a repository	No
no suitable repository available	No
no suitable open access journal available	No

no funds available to publish in an open access journal	Yes
lack of time and resources	No
lack of information on open access	No
If other - please specify	
15. How many new patent applications ('priority filings') have been made? ("Technologically unique": multiple applications for the same invention in different jurisdictions should be counted as just one application of grant).	0

16. Indicate how many of the following Intellectual Property Rights were applied for (give number in each box).

Trademark	0
Registered design	0
Other	0

17. How many spin-off companies were created / are planned as a direct result of the project?	0
Indicate the approximate number of additional jobs in these companies:	0

18. Please indicate whether your project has a potential impact on employment, in comparison with the situation before your project:	Difficult to estimate / not possible to quantify, None of the above / not relevant to the project

19. For your project partnership please estimate the employment effect resulting directly from your participation in Full Time Equivalent (FTE = one person working fulltime for a year) jobs:	0Difficult to estimate / not possible to quantify

I. Media and Communication to the general public

20. As part of the project, were any of the beneficiaries professionals in communication or media relations?	No
21. As part of the project, have any beneficiaries received professional media / communication training / advice to improve communication with the general public?	No

22. Which of the following have been used to communicate information about your project to the general public, or have resulted from your project?

Press Release	Yes
Media briefing	No

TV coverage / report	Yes
Radio coverage / report	Yes
Brochures /posters / flyers	Yes
DVD /Film /Multimedia	Yes
Coverage in specialist press	No
Coverage in general (non-specialist) press	Yes
Coverage in national press	Yes
Coverage in international press	No
Website for the general public / internet	Yes
Event targeting general public (festival, conference, exhibition, science café)	Yes

23. In which languages are the information products for the general public produced?

Language of the coordinator	No
Other language(s)	Yes
English	Yes

Attachments	ROBIN FINAL REPORT and Summary-29-Jan-2016.pdf, ROBIN%20logo_jpg.jpg
Grant Agreement number:	283093
Project acronym:	ROBIN
Project title:	Role Of Biodiversity In climate change mitigatioN
Funding Scheme:	FP7-CP-IP-SICA
Project starting date:	01/11/2011
Project end date:	31/10/2015
Name of the scientific representative of the project's coordinator and organisation:	Dr. Terry Parr NATURAL ENVIRONMENT RESEARCH COUNCIL
Name	
Date	29/01/2016

This declaration was visaed electronically by Tanya WARNAARS (ECAS user name nwarnata) on 29/01/2016