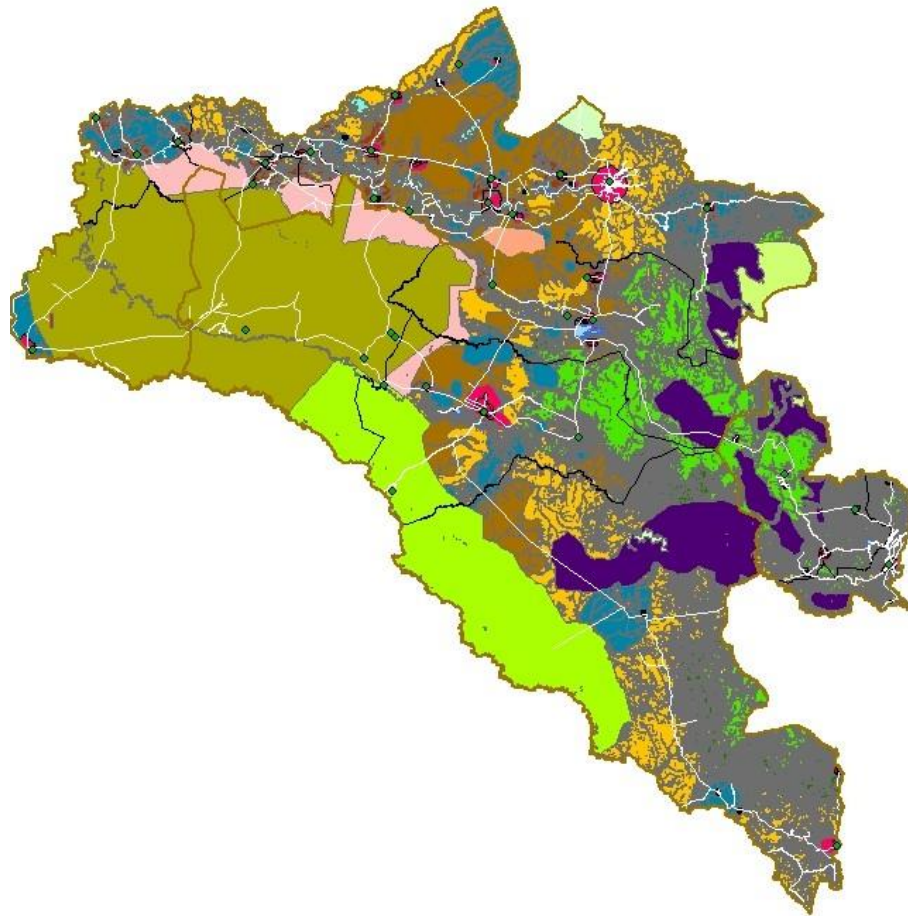




Integrated Urban and Rural Landuse and Development Plan of Gambella Peoples' National Regional State



EXECUTIVE SUMMARY

Horn of Africa Regional Environment Center and Network
Addis Ababa University
October 2019



Produced by: Horn of Africa Regional Environment Centre &Network-Addis Ababa University (HoAREC&N-AAU).

The study guided and coordinated by:

Dr. Azene Bekele-Tesemma Professional Consulting Services (ABT-PCS), Tel.+251-(0)911 206278 and 0944736565, P. O. Box 30929, Addis Ababa, Ethiopia; E-mail: Abt.pcs@gmail.com and /or bekelea2018@gmail.com

Editors: Azene Bekele-Tesemma (PhD), Prof. Sileshi Nemomissa, Wondwossen Girmay,

Design and Layout: Wondwossen Girmay

Published and distributed by:

Horn of Africa Regional Environment Centre &Network-Addis Ababa University

P.O.Box: 80773. Addis Ababa

Telephone: +251(0)111545315

E-mail:info@hoarec.org

Web: <http://www.hoarec.org>

Printing:

Sponsors: Government of Sweden; Swedish International Cooperation Agency

Recommended citation:

HoAREC&N-AAU. 2019. Integrated Rural and Urban Land use and Development Plan of Gambella Peoples' National Regional State.

Disclaimer

Copyright ©2019 by Horn of Africa Regional environment Centre &Network-Addis Ababa University (HoAREC&N-AAU)

The views expressed in this plan document are those of the author(s) and do not necessarily reflect the views or policies of the Horn of Africa Regional Environment Centre &Network-Addis Ababa University.

HoAREC&N-AAU encourages the use, reproduction and dissemination of material in this plan document. Except where otherwise indicated, material may be copied, downloaded and printed for research and teaching purposes, or for non-commercial use provided that appropriate acknowledgement of HoAREC&N-AAU as the source and copyright holder is given.

INTEGRATED URBAN AND RURAL LAND USE AND DEVELOPMENT PLAN OF GAMBELLA PEOPLES' NATIONAL REGIONAL STATES (GPNRS).

EXECUTIVE SUMMARY

**Horn of Africa Regional Environment Center and Network
Addis Ababa University
October 2019**



Horn of Africa
Regional Environment
Centre and Network



PREAMBLE

Owing to the fact that the economy is agrarian-based, land-use planning is central. Encroachment of agricultural activities on the forest, pasture, and wetland areas, and free grazing and urban expansion has led to severe environmental, forest and land degradation. In addition, lack of integrated land-use plans, absence of control on the use of land for what it is best suited, the rapid urban and industrial expansions have all contributed to the misuse of land. As a result, the land is not used for purposes that have a relatively greater economic return. Consequently, various land uses that could have effectively contributed to food security have not been realized. Noting this challenge, Proclamation No. 456/2005 required regional states to prepare a master land-use plan that “takes into account soil type, landform, weather condition, plant cover, and socioeconomic conditions by the competent authority”.

Ethiopia is aiming at fostering equitable spatial development across the country by conducting regional level master land use and development plans. In addition, Ethiopia is signatory to the international framework conventions and agreements, such as the Voluntary Guideline on the Responsible Governance of Tenure of Land, Fisheries and Forests in the Context of National Food Security, the Sustainable Development Goal (SDG), the Africa Union Declaration on Land Issues and Challenges in Africa and the Climate Change conventions (Kyoto Protocol and the Paris Agreement). Ethiopia has prepared policies, strategies and plans including the Regional Land Administration and Use Proclamations, Growth and Transformation Plan (GTP), and Climate Resilient Green Economy (CRGE) strategy. As part of realizing these legal instruments and strategies and also to overcome the different environmental and land management challenges of the various regional states, the national Government has been envisioning to carry out Integrated Land Use Plan and Development (ILDP) for decades. All peoples’ national regional states of Ethiopia have realized and indicated in their proclamations that an integrated, aligned and harmonized land-use plan and development are necessary.

Gambella Peoples’ Regional State (GPNRS) is characterized by a diversity of resources, in terms of its biophysical resources and its cultural and ethnic composition. This has influenced its historical and current settlement and land use patterns. Possibilities for social and economic transformation have been confined to the manipulation of rural lands for agriculture. Agricultural lands have been expanding into its pristine ecologies by deforesting valuable forests. Misuse of land for what it is not best suited has been playing havoc on many fronts. For instance, many of the national parks and other important wildlife habitats have become lands where livestock are freely grazing. The gazetted Gambella National Park is the best example of this. In other situations, as much as good lands are used for free-grazing, pastoral lands that are best suited to grazing are being used for agriculture that mines the nutrients from the shallow soils. The challenge in the economic loss that has resulted from misuse of the best agricultural lands, commercial forest expansion areas, as well as lands for tourism development, is significant. All these factors strongly suggest that GPNRS needs to use its rural and urban lands in a planned and harmonious way.

The main objective of ILDP is to guide the sustainable transformation of rural and urban lives and land resources of the people and environment of GPNRS by providing coordinated, all-serving, aligned and harmonized land-use plans that have avoided conflict between the different land-use types. The plans are developed by bonded involvement of the tripartite planning actors of the plan-driving Common-Commodity community groups (CCGs), plan-guiding senior professional consultants and plan-facilitating government institutions and staffs. Those who drove the planning process gave information and knowledge and information from bottom-up reflecting Kebele-level realities while those who guided the planning process used their school-thought and reflections from their experiences. The plan facilitators brought high-level knowledge and information related to policies, proclamations national and international commitments into the planning process from top-down.

The CCGs were organized and capacitated to articulate and table their social demand and ranked concerns in their Woreda level groups that constituted Kebele-level realities. They will continue owning

it through the implementation process. Similarly, the facilitators were organized into steering and technical committees at federal and regional levels whose members came from some 16 relevant ministries and bureaus respectively. The steering committee gave policy guidance and approval of the plans while the technical committees reviewed and critiqued the plan outputs periodically. However, from facilitators, the Agriculture bureau was the most involved facilitator which assigned counterparts to the planning expert-team and facilitated the routine planning process.

Horn of Africa Regional Environment Centre & Network Addis Ababa University (HoAREC&N- AAU) served as a lead secretariat of the plan facilitation institutions and hired about 35 senior-level consultants of specific disciplines and one lead ILDP study coordinator that provide technical guidance and facilitation in the planning process. The organization signed the memorandums of understandings and a common framework of engagement (CFE) with the GPNRS's government, and the Ministry of Agriculture. This has brought the 16 relevant ministries at the Federal level and the relevant bureaus in the GPNRS to act as the Federal Steering Committees (FSC) and Regional Steering Committee (RSC) respectively to actively and responsibly engage them in the facilitation work. Similarly, the Technical Committee at both Federal (FTC) and Regional (RTC) level was organized to provide technical support and evaluate and technically approve the study at various stages of the planning process. Therefore, it is fair to assume that this ILDP is the result of these bonded tripartite actors of the planning process.

ILDP programm

HoREC&N-AAU

PREFACE

It is a pleasure to present this final product of the Integrated Land Use and Development Plan (ILDP) for the Gambella Peoples National Regional States (GPNRS). The ILDP was initiated upon the official request of the government of the GPNRS and has been guided and successfully facilitated by the GPNRS in partnership with the Federal Ministry of Agriculture throughout the study. The ILDP is prepared to guide the economic, social and environmental transformation agenda of the regional government. The ILDP is prepared for six planning units of the GPNRS, three of its zones, the Itang special Woreda and Gambella City. Besides, separate ILDP was prepared for seven towns of the region, namely Gambella, Meti, Nyinenyang, Abobo, Itang, Tergol, and Matar.

The planning process adopted a unique approach in that it has been people-centered and truly participatory and transparent. Local communities have been engaged as the key drivers in the planning process through the direct involvement of the Common-commodity livelihood-sector Community Groups (CCGs). Expert groups of professionals (as consultants) guided the planning process and the project staffs of HoAREC&N of the Addis Ababa University together with the regional partners facilitated the overall process.

The ILDP is aligned with the national land use planning Roadmap designed for implementing a comprehensive land-use plan for the rest of the regions, city administrations and Zonal capital towns in the country. The expert consultants, most of whom were from Addis Ababa University, studied and compiled the scientific analysis of the soil and geology, forestry, land use land cover, energy, hydrology, climate and weather behavior, agroecology, gender, social and economic characteristics of the region. The natural potential of the land and levels of resilience have been thoroughly examined and new land uses have been re-assigned and revised in harmony with the CRGE agenda of the country.

I firmly believe that this Integrated Land Use and Development Plan would serve as an important instrument in guiding land-use decisions in the coming two decades in the region and serves as a model for subsequent land use plan preparations in other regions of the country. Let me use this opportunity to convey my sincere appreciation and words of thanks to our key partners, the Embassy of the Kingdom of the Netherlands and the Swedish International Development Cooperation Agency for financial support. The same goes for the Ministry of Agriculture and the National and Regional Steering Committee members, who have shown utmost commitment and dedication in overseeing the entire planning process from its inception to the review of this final product. Deserved thanks are also to the committed staffs of the HoAREC/N-AAU, the leadership and technical coordinators of the planning activities at the organization.

Professor Tasew W/Hawariat
President of Addis Ababa University

PREFACE

Having integrated special land use for Ethiopia is an overdue exercise. The land use roadmap document shows details of what we have foregone by not having it. This has been realized in our region as of decades ago. The current negative climate change impact makes the issues even more urgent. Our region is heterogenic in both physical and social environments. Any negative interference we do on one, could do damage to many of the others. This was why we wanted people-participatory and scientifically studied and planned Integrated Land Use and Development plans for our region, our three zones and for the Itang Special Woreda and the Gambella City. We were lucky to have Horn of Africa Regional Environment Center and Network Addis Ababa University (HoAREC&N-AAU) which accepted our request to develop the land use plan for the region. I highly appreciate and thank them for their considerations.

As we have been couching the planning process, livelihood-sector organized communities, reknown experts and steering committee members of our bureaus and relevant ministries participated in the development of the plans coherently. The outcomes are very pleasing. We now have integrated land use and development plans (ILDPs) in excellent reports and explicated maps. At this juncture, I would like to express my appreciation and endorsement of ILDPs and the commitment of my government for their implementation. Though no Land Use Plan serves as a blueprint, the plan is elegant in that it is generated by using harmonized systems of approaches. The plans are developed in view of the coming twenty years with established milestones for each of the 4 consecutive phases. On behalf of the peoples of the GPNRS, the Regional Council and myself, I would like to use this opportunity to thank the Embassy of the Netherlands and the Swedish International Development Agency for their generous financial support in the different phases of the plan development. Without their support, these achievements could not have been realized. Yet, though the plans are completed, implementation will continue by preparing bankable projects in the next phases. In this regard, it is my sincere belief that their support will continue. Ministry of Agriculture and related ministries formed the federal level Steering and technical Committees were instrumental in the political and technical perfection of the plans.

Finally, I also would like to appreciate and thank Dr. Azene Bekele-Tesemma Professional Consulting Services that technically guided the study and the planning processes and the ILDP program coordinator Ato Wondwossen Girmay. I congratulate both for this excellent work. I assure all the collaborators of my government in this venture and assure each that my government will do everything possible for the respect of the plans and implementation of the plans.

HE. Mr.Omod Ojulu
President of the GPNRS

ACKNOWLEDGEMENT

Integrated land use and development planning has been pending in most countries of Eastern and Southern Africa. Ethiopia is no different. Though integrated land use planning has been pending until the recent past, Ethiopia has now embarked on getting this important assignment done. The roadmap towards integrated land use and development planning for the entire country was produced and approved in early February 2017. Integrated land use and development planning exercise was started back in 2013 For Gambella Peoples National Regional State (GPNRS). Many technical and administrative professionals have contributed to its fruition. Members of the Steering committee were established to guide and approve the process and the outcome both at federal and regional levels. Without their committed engagements; we could not have bypassed the land use policy gaps. Likewise, the members of the federal and the regional technical committees played important roles in substantiating the top-down technical flow and understanding of the tri-partite participatory and integrated land use Planning process. Their roles in making the plan through the dramatized engagements of the top-down Policy and administration elites, the driving roles of the land users from the bottom-up, and the technical guidance of subject-specific professionals from “side-in” were rewarding. I thank all for making it a success.

The HoAREC&N-AAU had a strategic position in providing and facilitating the scientific-based planning environment and processes through recruiting and engaging higher professionals of different spectrum of study subjects. The counter experts from almost all ministries in the country and the regional bureaus and offices had a critical role in synchronizing local level knowledge and experiences in to the planning process. The GPNRS authorities, the local communities, the private sector and all sector bureaus and offices were corner stones for the successful completion of the planning. Now, it is possible to ascertain that the land use planning capacity at the National and Regional level has improved significantly. With the higher commitment of Dr. Araya Asfaw, Executive Director, HoAREC&N-AAU, from the inception up to production of the preliminary ILDP, and with the overall technical guidance of Dr Azene Bekele, and dedicated coordinators Dr. Almaz Taddess, Ato Wondwossen Girmay, both the rural and urban land use plans were completed for the GPNRS. Three Urban land use plans were additionally made based on their important and strategic economic, social, and political significance to the region and the National at large. Special thanks go to the members of the National and Regional Steering and Technical Committees. All deserve my special thanks I do not have words to express them enough. My sincere appreciation goes to the Embassy of the Kingdom of the Netherlands and the Swedish International Development Cooperation Agency (Sida) for their remarkable financial support which has brought our vision into reality.

Tigistu Gebremeskel A.
Director, Rural Land Administration and Use Directorate
Ministry of Agriculture

FOREWORD

When I was the Dean of Science at Addis Ababa University in 2005, I met Janny Poley from the Netherlands Embassy interested in initiating a regional environment program in the Horn of Africa. The region was among the three fragile regions globally needed interventions. The Embassy offered seed money to make an assessment and come up with a proposal. At the time, through the initiative of Professor Ensermu and Sebsebe, prominent botanists at the Faculty of Science, the University signed a Memorandum of Understanding with Addis Ababa City to establish the Gullele Botanic Garden covering nearly 800 hectares of land at the outskirts of the City. We proposed to establish the Horn of Africa Regional Environment Centre and Network (HoAREC&N); primarily covering six countries (Djibouti, Ethiopia, Kenya, Sudan, South Sudan, Somaliland) to address the region's environment challenges and the Centre hosted by Addis Ababa University to be in the premises of Gullele Botanic Garden.

A number of transformative, trans-boundary and trans-disciplinary programs were developed. Wildlife protection was one of the programs. After the war in Sudan, Wildlife Conservation Society (WCS), a US based organization observed for the first time a large wildlife migration from Gambella region of Ethiopia to South Sudan, considered the largest migration next to Serengeti. WCS based in South Sudan studied the migration pattern, the migration pattern in Gambella region was not very much known. HoAREC&N took the initiative to fill in the gaps. Gambella People National Regional State with the size of Rwanda having a population less than three hundred thousand at the time was a focus of large scale agriculture investments. During one of the reconnaissance studies, a high level of dignitaries including ambassadors led by Xavier, the EU Ambassador and State Minister of Agriculture took a helicopter ride to observe the migration. The dignitaries were amazed by the sheer size. At the same time they were disappointed since the agriculture investment was within the migration corridor. The Ministry of Agriculture took immediate action to rectify the problem. But the problem required a permanent solution.

In consultation with the Ministry of Agriculture, the Ethiopian Wildlife Conservation Authority, HoAREC&N proposed to develop an integrated land use plan for Gambella. Led by the Ministry of Agriculture, a high level steering committee was established. A technical committee including key agencies such as Mapping Authority, Meteorology Agency, and Statistics Agency was established. At the regional level, a steering committee chaired by the President of Gambella Regional State was formed. Cascading down to Wereda level, technical committees were established to ensure community participation. Dr. Azene Bekele, was highly recommended to technically lead the initiative based on his success for similar exercise in Rwanda. The European Union joined the momentum through IGAD and later SIDA came on board. The importance of an integrated land use plan was immediately understood by the government. An advisory office with a rank of a minister was formed under the Prime Minister to do the same in the rest of the regions. Currently, the office is under the Planning Ministry.

The purpose of the whole exercise is to develop bankable projects based on the land use plan that could potentially transform the region; hence we are only halfway through. Further, we should also think of scaling it to the horn of Africa region. As my Sudanese colleagues used to say, why should Sudan grow water intensive plants such as sugar cane which should be grown in South Sudan or Uganda where there is plenty of water? Sudan should import that and grow more appropriate produce suitable for the land and export. This requires an integrated land use plan at the regional level. I am certain IGAD and developing partners would be interested in the idea. I hope to see that in the future.

Araya Asfaw (PhD)
Founding Director
Horn of Africa Regional Environment Centre & Network

MESSAGE

It has been a privilege for the HoAREC&N-AAU to co-initiate and lead the facilitation of the land use planning process of the ILDP for the GPNRS. Absence of integrated and synergized land use plan has been a serious cause for the haphazard allocation of lands for various development purposes (including large scale agricultural investments) without the proper analysis of the potentials, limitations and resilience capacities to climate change impacts and human use in the GPNRS. The launching and implementation of this land use planning initiative has triggered a national interest and, hence, a national land use planning roadmap has been developed for the country. This ILDP of the GPNRS is, thus, carefully aligned with the national roadmap and the CRGE.

The GPNRS is unique in that it has very diverse natural habitats with relatively less disturbed and 'pristine' environmental conditions. The natural moist high forests, vast woodlands and grasslands harbor great variety of flora and fauna. The rich hydrological resource, the highly productive land that is very suitable for irrigated and rain-fed agriculture, the unutilized/undeveloped forest resources, aquatic and fishery resources are yet untapped. The rich wildlife resources in national parks and wildlife reserves are fundamental for eco-tourism development and local economic growth. At the same time, these resources are becoming under growing threats due to uncontrolled human interference and land use change driven by external economic and policy factors. This ILDP has been prepared to counter the imminent impacts and guide sustainable utilization of the land resources for the economic wellbeing and environmental sustainability of the region. This ILDP is intended to serve as an important instrument for the sustainable social, economic and environmental transformation of the people of the GPNRS.

The ILDP has been closely overseen by the federal and regional steering committee, and advised by the federal and regional technical committee. The main beneficiaries, the local communities, have been organized into different groups of common-commodity livelihood sectors and served as drivers of the planning process from bottom-up, while high level expert groups guided the process from the side-in and the national and regional steering committees from top down. It is our hope and belief that this ILDP document will be effectively used to guide land use decisions in the region and will serve to achieve sustainable economic transformation and natural resource use.

Mekuria Argaw (PhD)
Director, HoARC&N-AAU

ACKNOWLEDGEMENTS

Boosting land resilience against the inevitable and negative climate change impacts, and, at the same time, boosting land productivity on a sustainable basis has been a concern at the forefront of Ethiopia. Misuse of lands for what they are not comparatively best-fit has continued. At the same time, the basin/watershed-based land utilization/development plans have not been made at administrative levels. They have not been prepared by organizing communities/beneficiaries letting them drive the process. Consequently, they suffered from a lack of peoples' ownership and buying in. Examining the implementation of the river-best basin study (Omo-Ghibe) shows that not more than 1/3 of the planned land uses are implemented as recommended.

Again, conducting a critical analysis on the absence of beneficiary acceptance and outright implementation of the plans show that the major reasons are shunning to people-centered land use planning at an administrative level, and lack of 3-actors bonded participatory planning approach. Consequently, these puzzling and challenging issues of the absence of land use planning acceptance made a formidable basis for the birth of the Integrated Land use and Development Planning (ILDLP) approach. This was again justified by the request of the Gambella Peoples' National Regional State (GPNRS) that had an experience of the study of Baro-Akobo basin to HoAREC&N- AAU to come up with a people-centered and comprehensive plan for each of the region, the three zones, Itang Special Woreda, and towns. This is why we opted for organizing the communities into CCGs to drive the process and organized the different bureaus and even ministries into steering and technical committees to facilitate the process and selected and involved distinguished consultants to guide the process.

We thank all the planning actors for their invaluable information; their driving, guiding and facilitating roles; and for their critiquing and approval of the plans. Many more have contributed to the success of the production of ILDP. It will not be possible to mention all. All deserve our thanks. Members of the many CCGs deserve our special thanks. Without their driving involvement, the plans could not have become grounded and real.

Our special thanks go to the Ministry of Agriculture, the Bureau of Agriculture of Gambella, members of the federal and regional steering committee as well as the members of the technical committee from the same ministries, agencies, organizations, and authorities. Our special thanks go to Embassy of Kingdom of Netherlands (EKN) and Swedish International Development Agency (Sida) for the financial and advisory supports in the different phases. We also thank those who participated in the many critique workshops by coming from many regions. They have been truly instrumental in our inspirations, humor, and strength. We also thank the staff of HoAREC&N-AAU without their concerted effort and patience; we could have not been successful. All the appreciations go to all the institutions, communities, individuals, who participated in the planning exercise while all the errors and omissions rest with us.

Azene Bekele Tesemma (PhD)

Ato Wondwosen Girmay

¹ The bonded three actors are: Common livelihood-sector Community Groups (CCGs) who drive the planning process from bottom-up, administrative level facilitation institutions that facilitate the planning process from top-down and senior most professionals who guide the planning processes from side-in conducting the plan in harmony -

EXECUTIVE SUMMARY

The Integrated Rural land-use and development plan.

Gambella Peoples' National Regional State (GPNRS) is located in the southwestern part of Ethiopia, at a distance of 777 km from Addis Ababa. Administratively speaking, the region has three zones and one Special Woreda. There are 226 Kebeles. Five of the kebeles are that of Gambella City. According to the regional government's policy documents, GPNRS is one of the emerging regions of the country and a home for the five indigenous ethnic groups, the Nuer, Anywa, Majang, Oppo, and Komo. In addition, following the resettlement program of the 1980s E.C., a good number of people from different parts of the country moved to the region. Recently, the refugees from South Sudan (estimated 350,000) are becoming the most dominant, imposing a threat to the environment, socioeconomic and cultural values.

According to CSA (2013) projection, the region had a total population of 409,002 in 2015. With an estimated area of 34,063 km², the region had a population density of 12 / km². However, the distribution of the population among the Zones varies considerably and the Majang zone has the highest while the Anywa Zone the least populated. The estimations also showed that 32.27% of the people in the region live in urban areas while 67.72% live in rural areas. The Gender study has noted that land is the most fundamental resource to women's living conditions, social and economic empowerment and their struggle for equality in the region. However, due to socio-cultural reasons, women's rights to access, control, and benefit from land are less than those of men. The study has considered gender disparities, constraints, and opportunities that have an impact on sustainable development. The economy of the GPNRS is totally dominated by mixed farming. In other words, a large majority of the regional population, about 85.5%, derive their livelihood from agriculture.

According to the regional strategic plan of 1998-2002 E.C., GPNRS is endowed with natural resources such as perennial rivers, lakes, and massive fertile arable lands with a favorable climate for cash crops. It is also characterized by rich jungle forests, wildlife, and fish resources. GPNRS also has a great deal of livestock holding. The ILDP study showed that Jor, Godere, and Abobo Woredas have the highest livestock holdings. Similarly, the beehive ownership in the Region is significant although it shows variation among the sampled households considerably. For example, the Majang Zone shares about 54% of the beehives owned among the sampled households indicating that it is the main livelihood activity in the Majang zone. The climate of the GPNRS is formed under the influence of the tropical monsoon from the Indian Ocean. The region is characterized by high rainfall in the wet period from May to October and has little rainfall during the dry period from November to April. As the region occurs in the lower Baro-Akobo basin, it is endowed with rich water resources. A number of major rivers flow across the region and to neighboring countries. For example, Baro is a transboundary navigable river which flows to South Sudan. Detailed hydrological and sanitation studies have been carried out to facilitate and guide the characteristics and allocation of the various land-use types.

The GPNRS has six different agro-climatic zones among which, the Moist Hot-lowland and wet lowland cover relatively larger areas of the regional state compared to others. On the other hand, wet hot highland has exhibited a fragmented pattern of distribution and covers smaller areas in the Region. The study on forest cover dynamics of the Region revealed that forest degradation in Anywa and Majang Zones has been increasing since 2001 and continued until 2010. Three broad categories as the closed forest, open forest and protection forestry were proposed as a means to abate the degradation while providing economic returns from the forestry sector. The rangeland and livestock population study indicated the highest population of livestock in the Nuer Zone and the least in Itang Special Woreda. A general declining trend of livestock population across the region has been observed over the last ten years from 2010 to 2015. Exceptions are the Majang Zone and the Itang Special Woreda. The ILDP has also investigated aquaculture and fisheries development in the Region. The hydrological network of rivers, lakes, and wetlands provide the GPNRS unique opportunities for the development of aquaculture and fisheries.

The rural infrastructure study of ILDP considered road, transport, education and health sectors. According to the study, a significant increase in road and transport infrastructure was envisaged from 2020 to 2040. The infrastructure includes roads, docking ports, airports, and bridges. According to the education sector infrastructure, for instance, the Gambella Regional State will have a significant increase in schools of different levels at the end of the planning period, 2040. Similarly, there will be a significant increase in the number of health facilities at the end of the planning period. Details are given in their section-reports of this plan document. In this report, the integrated urban plans of 7 towns/cities of the GPNRS are included. Their whereabouts are shown in Figure 1. Plan details of each town are given in the separate reports. The area coverage of each of the major land uses is given in Table 1. In general, about 33 beneficiary institutions are identified for involvement in the implementation phase. The largest land area is allocated for wildlife habitat. Many of the big game wildlife are pushed to the south edge-corner of Ethiopia. It may be true to say that the wildlife of Ethiopia is now, for the most part, in GPNRS. There are various kinds of wildlife habitats. The cumulative land planned for this land use is ~41.87 percent of the region. The second-largest land area is the agricultural land that occupies ~26.6% of the total land. The third-largest land use is planned for forestry at ~19.9%. The land allocated for biodiversity and ecological conservation covers 2758 km² or 9.12% of the region that makes it the 4th largest land area. The least is the land area allocated for aquaculture development and marketing. It covers 2.47% of the region or 747Km². The ILDP of GPNRS is a comprehensive plan. They include singly or jointly other land uses such as infrastructure plan as well as beekeeping and honey production. The details are given under their own sections of the report. For enforcing implementation of the land use plan and arbitrating defaulters, an institution that is autonomous and structured down to the Woreda level is proposed. It is also hoped that the GPNRS will issue a regional land use policy for implementations of this integrated land use plan by establishing such an independent Land Use bureau to play surveillance, plan-updating, and regulatory functions during the implementation period.

Table 1. Area and percentage significance of the planned rural land uses of GPNRS

Land Use Category	Planned Integrated Land-use type	Area in Km2	Area in ha	%
Forest Land	Industrial forest	2242.02	224202.09	10.62
	Industrial forest with care	140.68	14067.57	0.67
	Industrial mixed forest with care	68.07	6807.13	0.32
	Industrial Plantation Forest Development	1358.01	135800.90	6.43
	Protection Forest	693.66	69365.74	3.28
	Riverine Forests	18.88	1887.96	0.09
	Roadsides Woody Vegetation	5.37	536.96	0.03
Biodiversity and Ecological Conservation	Combretum-Terminalia woodland & wooded grassland (CTW)	123.65	12365.11	0.59
	Moist Evergreen Afromontane Forest (MAF)	283.99	28398.50	1.34
	Transitional Rainforest (TRF)	1509.56	150955.53	7.15
Wildlife Habitat	Community Wildlife Conserved Area	0.70	69.53	0.00
	National Park	3440.25	344025.25	16.29
	Regional Wildlife Park	2925.02	292501.57	13.85
	Wildlife Reserve	508.90	50890.13	2.41
Agriculture development	Commercial Agriculture/Irrigation	1914.09	191408.52	9.06
	Rain-fed Agriculture	3838.25	383824.81	18.17
Aquaculture	Aquaculture Area	254.43	25443.25	1.20
Rangeland	Rangeland/Livestock	1434.16	143415.88	6.79
Others	Rural Settlement	275.34	27533.82	1.30
	Water body	65.62	6561.97	0.31
	Wetland	31.19	3118.77	0.15
Total		21,131.84	2113180.99	100.05

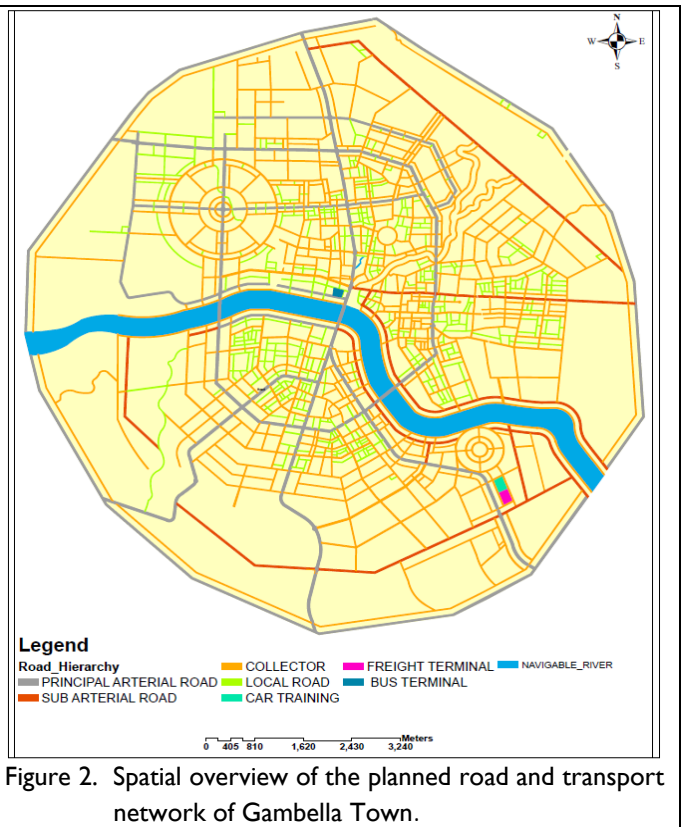
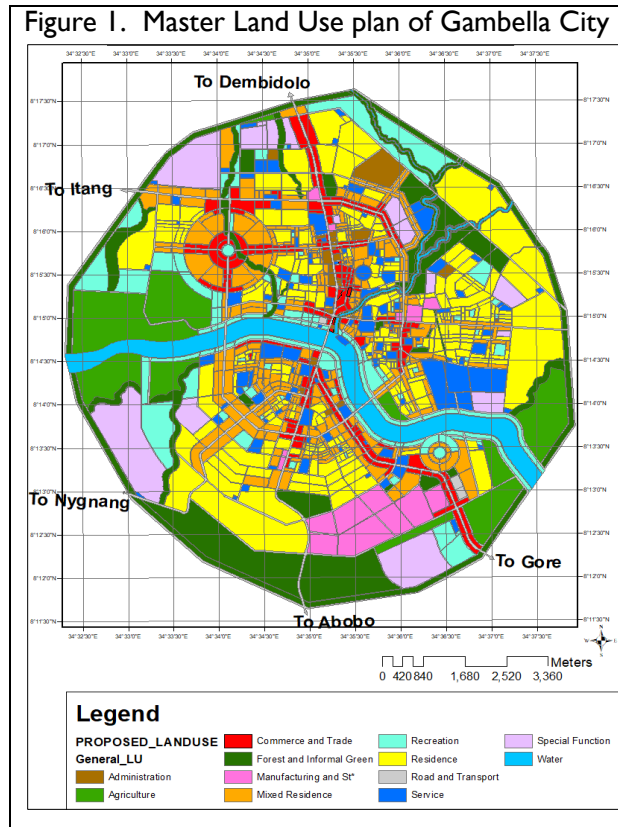
Integrated Urban Land Use and development plans

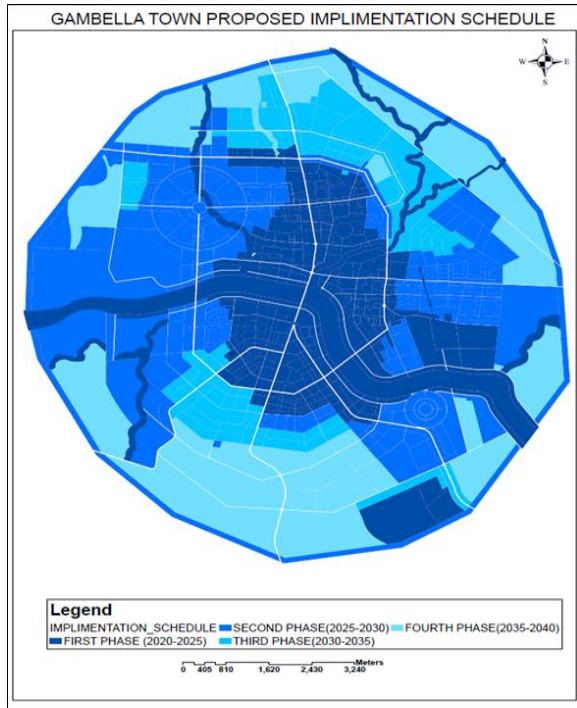
In compliance to the “Roadmap for National LAND use planning”, the integrated urban land-use plan for GPNRS included Gambella City (the regional capital city), capital towns of the three zones (Abobo town of Anywa, Nyingang town of Nuer, and Meti town of Majang), and Itang town of Itang Special woreda. In addition, the urban Land use plan study depicted that Tergol (currently large village) is situated in a strategically important location of a high-potential fish-market area that can also serve as a buffer zone for the in-holding possibility of the immense wildlife of the Gambella National Park. Therefore, Tergol was considered as one of the strategic towns for whom an urban land-use plan is produced. Another equally important town is Metar-Burbe town that deserved consideration for urban planning. It is situated at a scape root of a variety of wildlife to South Sudan and a migratory route for the Fulata people coming from as far as Chad. This has been at a point of a loose border that often causes smuggling of the children by the same Fulata cattle keepers. Therefore, this strategic town also deserved integrated urban planning for intensification of livestock marketing, in-holding the wildlife and for facilitating tourists with a resting place for wildlife tourism. The urban plan of Metar will also support boat riding facility at Burbe town. The urban land-use planning identified up to 14 urban land use types as valid for each of the seven urban land-use planning units including Gambella city. However, this brief executive summary presents that of Gambella City only. Please refer to the table and maps of Gambella city on the next pages. Similar to the rural integrated land use plan, the urban land-use plan considered a period of 20 years partitioned into four 5-year periods.

Table 2. Area extent and percentage significance of the planned urban land uses of GPNRS

General Land Use	Area in ha	%	Total Area (ha)	Cumulative Percentage	Standard	Remark
1. Administration	95	1.1	3840	45.5	40%	5.5% of land is for local road
2. Commerce & Trade	366	4.3				
3. Mixed Residence	900	10.7				
4. Pure Residence	1794	21.3				
5. Services	414	4.9				
6. Manufacturing & Storage	272	3.2				
7. Transport & Road Network	1031	12.2	1031	12.2	30%	Please note that 12.2 % will be supplemented by 5.5% (above) and 12.22% shown below which makes it 29.94%. This is in line with the national standard road density.
8. Forest & Informal Green	1161	13.8	3568	42.3	30%	12.22% of land is for local road
9. Recreation	677	8.0				
10. Urban Agriculture	277	3.3				
11. Aquaculture	337	4.0				
12. Urban Zoo	117	1.4				
13. Rivers	430	5.1				
14. Special Function areas	569	6.7				
Total	8435	100.00				

The current Gambella City is found out that it is situated on prime agricultural land. In addition, it is at the northern corner of the regional state which is not economically accessible to the many beneficiaries. Therefore, maps at the following page depict the urban plan of Gambella city designed to serve as a political Capital city of the Region. Detailed large-scale maps are available on a 5:000 scale. The economic capital is being planned at a central place that fulfills the criteria for urban planning, not highly suited for agriculture intensification, and, at the same time, is fairly central to all beneficiaries of the region.





Phase 1: 2020-2025 (limited to the dark blue areas):
Renovation of the existing settlement, development of urban agriculture, and implementing environmental protection measures.

Phase 2: 2025-2030 (focusing on blue colored areas):
working on commerce and mixed land use, cultural centers, opening public spaces, aquaculture, urban zoo and green belt of the town.

Phase 3: 2030-2035 (light-blue): expansion of mixed land use and residential areas.

Phase 4: 2035-2040 (colored Cyan): the establishment of industries and expansion of all urban land-use types.

Figure 3. Implementation time plan map of Gambella city

Integrated Urban and Rural Land Use and Development Master Plan of GPNRS

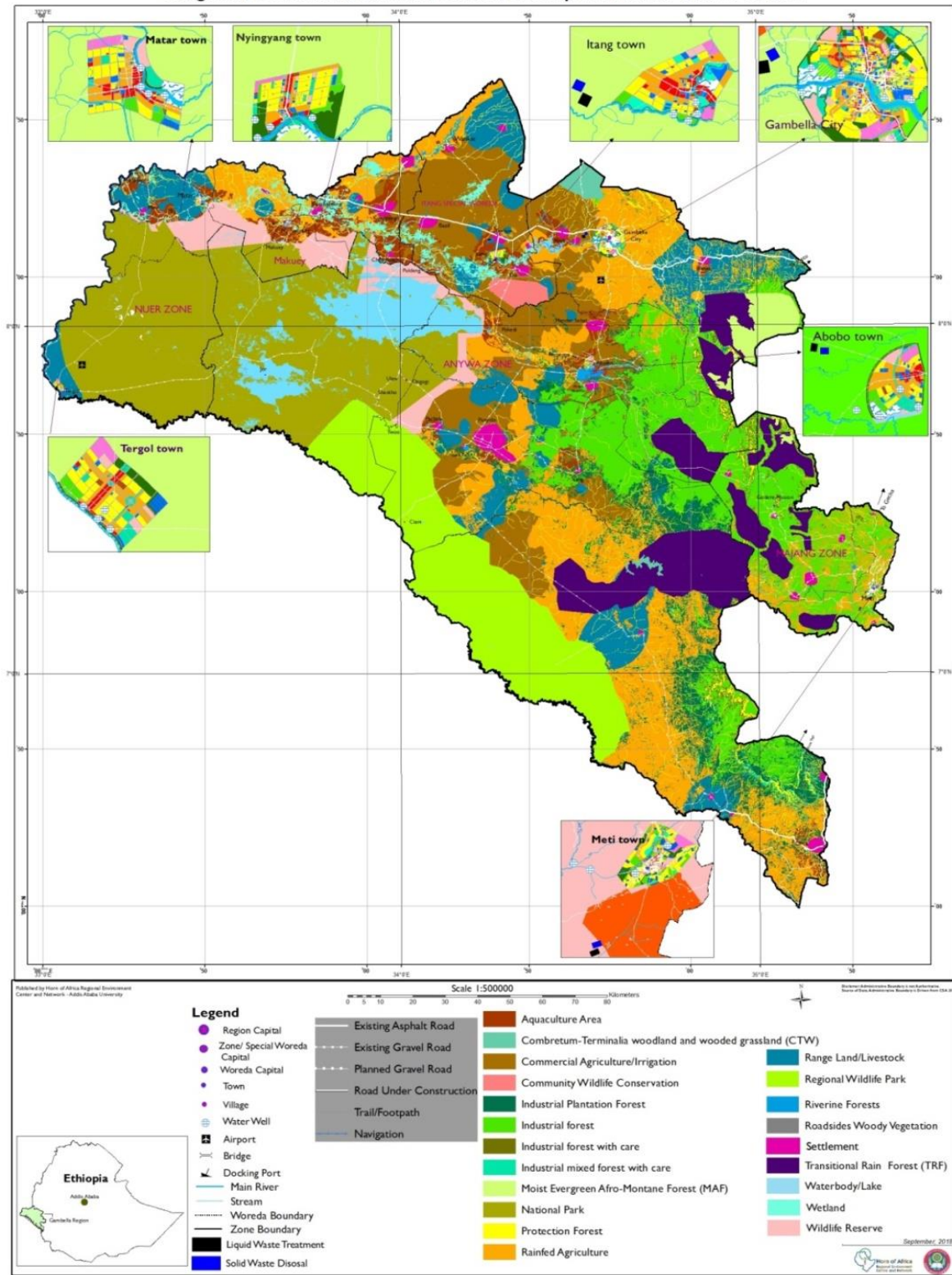


Figure-1 Integrated Urban and Rural Land use and Development Plan map of GPNRS

ILDP PLANNING METHODOLOGY AND PLANNING ACTORS

METHODOLOGY



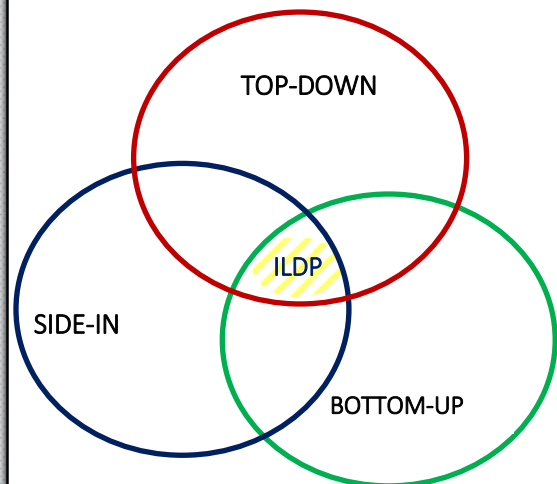
FUSED PARTICIPATORY PROCESS FOR BETTER OWNERSHIP OF THE PLAN BY THE BENEFICIARIES

PLANNING ACTORS

PLANNING DRIVERS (LIVELIHOOD SECTOR COMMUNITIES): --- BOTTOM-UP
 Local community organized as CCGs (Common Commodity Groups) that are organized based on livelihood preference. These are priorly identified, sensitized, organized and capacitated to DRIVE the planning process.

PLANNING -GUIDE EXPERTS:- SIDE IN
 Professional consultants/experts recruited based on study subject, knowledge and experiences.
 Local experts from respective sector bureaus /offices

PLANNING FACILITATORS:
 Institutions established to facilitate the planning process. These include members of the Steering and technical committees that are organized at regional, and federal levels



LIST OF PLANNING GUIDE EXPERTS

Table 2 List of ILDP planning guide experts

No	Name	subject of study in ILDP
	ILDP project coordination	
1	DR.AZENE BEKELE- TESEMA	Lead, ILDP study coordinator
2	ATO WONDWOSSEN GIRMAY	ILDP Program coordinator
3	ATO FIKREYOHANES YADESSA	Roads and transport
4	ATO HABTAMU TABOR	Education infrastructure
5	ATO KASSAHUN ABERA	GIS and remote sensing
6	ATO LAKEMARIAM YOHANNES	Weather and climatology
7	ATO MENGISTU NEGASH	Agriculture
8	DR. MINBALE ASCHALE	Sanitation
9	ATO SHIMELIS TEFAYE	Gender
10	ATO SINTAYEHU ABATE	Health infrastructure
11	ATO TESHAYE GEBRESELASSIE	Forestry
12	ATO TESHOME BEYENE	Gender
13	ATO YARED JEMANEH	Rural and urban settlement
14	ATO YISAHAK DEMISE	Urban waste management
15	DR. ABAYNEH ESAYAS	Geology and soils
16	DR. ASHENFI MENGISTU	Rangelands and livestock
17	DR. FANUEL KEBEDE	Wildlife and Tourism
18	PROFESSOR. SEYOUM MENGISTOU	Marine ecology
19	DR. TADESSE WOLDMARIAM	Ecology and biodiversity
20	DR. TEFAYE DEMISSE	Mining
21	DR. WORKNEH KASSA	Sociology and Marketing
22	DR. YILMA SILESHI	Hydrology
23	ATO ELIAS BIZUAYEN	GIS and remote sensing
24	ATO SAMUEL HAILU	GiS &RS and Geodatabase system
25	DR GUDINA LEGESE	GiS map layout and protocole
26	ATO KASSAHUN ABERA	GIS and remote sensing
27	PROFESSOR. ABEBE GETAHUN	Aquaculture, and ILDP synthesis
28	PROFESSOR. TENALEM AYENEW	Water supply
29	W/O FANAYE TADESSE	Urban planning
30	DR. MELESE DAMTIE	Land use policy
31	DR. GUDINA FAYISSA	GIS , RS, and geodatabase
32	DR. MERSHA ALEMU	GIS , RS, and geodatabase
33	DR.MEKURIA ARGAW	Land husbandry
34	ATO YARED TILAHUN	Settlement and demography
35	DR. WONDIMU ABEJE	Urban plan synthesis
36	DR. BIRHANU MATHEOS	Language editor
37	PROFESSOR SILESHI NEMOMISSA	Synthesis of ILDP and SESEA study
38	DR. GETACHEW BEKELE	Energy planning
39	ATO TSEGAYE G/MEDIHIN	M&E for ILDP
40	PROFESSOR. BELAY SEMANE	SESEA study evaluation



የጋምቤላ ሕ/ብ/ክ/መንግስት
Gambella Peoples' National Regional State



ግብርና ሚኒስቴር
MINISTRY OF AGRICULTURE



**Embassy of the
Kingdom of the Netherland**



Sweden
Sverige



PROMOTE - NETWORK - FACILITATE
TO IMPROVE ENVIRONMENTAL GOVERNANCE AND MANAGEMENT

