Kinabatangan, A Corridor of Life

A Vision for the Kinabatangan 2020
Lower Kinabatangan Floodplain
Malaysia

WWF Malaysia
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Introduction

The Lower Kinabatangan was identified for conservation in the 1980s when scientific research continued to produce convincing evidence of the importance of this area for wildlife conservation. This was followed by a study of the tourism potential of the area by WWF Malaysia that revealed potential for nature tourism and endorsed the concept of a Wildlife Sanctuary.

Map of Sabah

In 1992, the State Government saw the need to establish conservation areas in the lower Kinabatangan and the need to modify policy on land development. In 1996, WWF Malaysia assisted the Wildlife Department to review conservation and development issues. This came to the result of the proposed sanctuary comprises blocks of land that link the mangrove areas near the coast with the existing protected areas further inland, creating a corridor of floodplain habitat to maintain the ranging patterns of wildlife. Nature tourism may be one way conservation could contribute to the livelihoods of the local people who are being affected by depleting natural resources.

In mid 1990s, a community based project funded by NORAD and WWF Norway based in the village of Batu Putih in the lower Kinabatangan is developing a model where tourism is used as a tool for local development, combined with environmental concerns and wildlife conservation. WWF Malaysia is acting as a facilitator to help the development of the local community.

In mid 1998, Partners for Wetlands, an initiative by WWF Netherlands, was set up to seize opportunities for wetland management, conservation and restoration. This programme encourages stakeholders to work together as partners to identify wise use of
the wetlands and wise investment in order maintain the natural capital. On November 16 1999, the Lower Kinabatangan was declared as Malaysia’s first Gift To The Earth by the Chief Minister of Sabah during the WWF Annual Conference in Kota Kinabalu.

Over the past years it has become evident that the land use management in the Lower Kinabatangan Floodplain with comprising of upstream logging activities over the years and development of oil palms have contributed to the problems such as fragmentation of forests, degradation of wildlife habitats and flooding. During the project phase of Partners for Wetlands (1998 – 2001), a series of work was carried out, which include hydrological surveys, oil palm economics, commercial viability of tree planting to enhance forest corridor, soil surveys, and establishing two model sites for tree planting at flood-prone areas. A land use forum organised in April 2001 have reached a consensus among participants that all stakeholders acknowledge the problems in the floodplain and agree to come together to address these problems affecting all of them. An action plan will be developed and implemented with the cooperation of various stakeholders.

A vision is now developed by WWF Partners for Wetlands Programme, envisage the Lower Kinabatangan in 20 years from now. The vision to be shared among the stakeholders of the floodplain in order to achieve an integrated solution for a sustainable management of the Lower Kinabatangan Floodplain.

The vision is a practical picture of the future WWF seek to create. It aims to present solutions and win win situations, through collaboration between stakeholders through partnerships. This will also influence investments and policies in favour of this vision. Its message is particularly for the leaders and professionals who have the power and knowledge to help to turn visions into reality. It also aims to inspire those who wants to managed their investment wisely in the wetlands, to initiate such action themselves and inspire other to adopt such wise management practices.

Model sites to demonstrate restoration of forest through natural regeneration, planting of commercial viable native tree species and sound ecotourism development are to support the viability of this vision. The model sites will be developed with stakeholders based on the vision. The role of WWF Partners for Wetlands is to provide technical expertise, facilitating for professional contacts at national and international level, assisting in funding and source of datas and findings.

The approach and results of these model sites and vision are expected to be adopted by other part of the Kinabatangan, Malaysia and the Asian Region through respective industry, government or other bodies.

WWF believes these threats can be overcome by finding long term and lasting solutions that combine economic and ecological benefits. This vision document presents a view of how such benefits can be achieved.
Chapter 1

Why is the Lower Kinabatangan worth saving?

The floodplain of the lower Kinabatangan River is a key site for conservation of the natural environment in Sabah. Why is this site so important—locally, nationally and internationally?

1. It holds a tremendous variety of natural habitats. These include limestone outcrops, oxbow lakes, riverine forest vegetation, dry lowland dipterocarp forest, seasonal swamps, and tidal mangroves. It is one of Malaysia's largest floodplains, and is special and rare.

2. It has many economic opportunities, because it is one of the most productive and significant among the many types of wetlands. It is rich in species, crucial for fisheries, and important to the local economy.

Formed by Sabah’s longest river, the Kinabatangan River, 560km long, the main functions and values of the floodplain include supporting a range of plants, wildlife species and habitat which in turn provides an important recreational resources such as tourism; regulates water flow and flood waters by storing rain water and releasing run-off evenly, the floodplain can diminish the destructive effects of flooding downstream. The floodplain acts as a water filtering system, expected to provide clean water supply for Sandakan areas and villages. It supplies a wide array of forest products such as fuel wood, timber and bark to resins and medicines for the use of villagers for centuries; and transportation on the main river for villagers and transporting goods which serves as an alternative to more expensive road transport.

Map of Lower Kinabatangan Floodplain
The floodplain is home to many rare and endangered species, including freshwater rays and sharks, hornbills, crocodiles, elephants, proboscis monkeys and orang utans. Plant life may include 1,500 species in the lowland dipterocarp forest, 600 in freshwater and riverine forests, 300 on limestone outcrops, 50 in mangroves and coastal forest, and 10 species in lakes and treeless wetlands. The Gomantong Caves contain one of Sabah's two most important sites for the birds' nest trade, and the limestone outcrop houses endemic plants and animals found nowhere else on earth.

The floodplain is home to many rare and endangered species

The Lower Kinabatangan is an ecotourism 'hot spot'. The Lower Kinabatangan is probably the best wildlife viewing location in Southeast Asia. It is the site of the only current research on orang utans in the wild anywhere in the world, and population densities of orang utans are notably high. The river has a unique history, spanning the 16th Century visit by Admiral Cheng Ho, the establishment of Dutch tobacco farms in the 18th and 19th Century, and a turbulent history during the Second World War.
Chapter 2

But look at the situation now!

Important steps have been taken to save the Kinabatangan’s natural resources and its special qualities. However, further improvement to the situation is still critical. Protection and increase of forest habitat to improve the sanctuary are necessary to guarantee the future of the area. Many threats still occur or are increasing.

Today, 85% of the floodplain has been converted from forest to agriculture. The remaining forest areas amount to about 26,000 hectares designated for the Kinabatangan Wildlife Sanctuary, another 11,000 hectares within Forest Reserves, and small patches on alienated land destined for conversion.

Figure 1: Oil palm versus forest reserves in Sandakan District

The remaining forest is fragmented. Some of the Forest Reserves are as small as 100 hectares (1 sq km) situated around small limestone outcrops containing birds’ nest caves. These small patches are unlikely to be sustainable, as the forest is too small to support the food supply for the birds, and susceptible to outside influences such as fire and drought.

Commercial logging operations have ceased, most of the remaining Forest Reserves being categorised as Class I Protection Forest. However, they are not free from disturbance. Sawmills elsewhere are facing timber shortages, and the temptation to remove timber illegally is strong. The traditional practice of ‘meminggir’ logging (felling trees near the water’s edge by intruding with small boats during floods) can still be seen. Fires have occurred in several of the forest patches. Companies continue to apply for forest land to be converted.
Most of the conversion to large scale oil palm plantations has been done in the drier areas. This has left forest remaining primarily in the wetter, low-lying areas near the river, but even these have been converted in places, creating agriculture in places which are susceptible to floods. This has resulted in severe fragmentation within and adjacent to the proposed Kinabatangan Wildlife Sanctuary.

Oil palm development
Due to the declining timber resources in Sabah the State has explored other forms of economic activity, and the success of oil palm in Peninsular Malaysia made the crop a natural choice. Moreover, the decline in the international prices of cocoa beans, cocoa and rubber encouraged planters to look for alternative crops. Land constraints in Peninsular Malaysia were another factor contributing to the development of oil palm plantations in Sabah. The scarcity of land in Peninsular Malaysia drove prices of agriculture land upwards and, as a result, large plantation companies based in Peninsular Malaysia began to scout elsewhere for cheap land for oil palm cultivation. Sabah, with a large quantity of logged over forest, and cocoa and coconut plantations that were not very profitable, was a natural choice.

Oil palm plantation development accelerated in the late 1980's. Two decades ago, only 1% of Sabah's land area was planted with oil palm but that figure has risen to 11% today, totalling an estimated 842,496 hectares in 1998. In March 1998, the Sabah State Government announced plans to expand the cultivation of oil palm in the Interior district to three times the current acreage by the year 2003.

Figure 2: Oil palm coverage in Sabah by District (1996)
The Kinabatangan area made up approximately 28% of the total planted area in Sabah in 1996. There are approximately 20 palm oil mills in the region. Most of the plantations are on gently sloping ground, but some adjacent swampy and flooded areas have also been cleared. Near the river, at least 75 square kilometres of flood-prone land are under oil palm (Table 1).

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<th>Area affected by floods (ha)</th>
<th>Percentage flood-prone</th>
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<td><strong>63467</strong></td>
<td><strong>7699</strong></td>
<td><strong>12%</strong></td>
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</tbody>
</table>

**Table 1: Floodprone agriculture land**

Today, the cost of developing a plantation on peat soil with its soft and loose structure can be 50% higher than in more ideal soils. The operational cost of a plantation in such areas is also at least 7% higher. In the Kinabatangan, where land along the riverbank is prone to floods, the damage on a plantation in the early stages of seedling growth can cost as much as RM5,000 per hectare or more. In the 1996 flood, a total of 1,900 hectares of young palms in the low-lying areas in one of the Kinabatangan tributaries were destroyed, resulting in a write-off of RM 4.4 million in new planting expenditure. The company subsequently rehabilitated 406 hectares and was examining ways to either rehabilitate the remainder for oil palm or for alternative uses.

Many plantations have left these floodprone areas undeveloped after a few attempts at replanting had failed due to recurring floods. Another approach by an oil palm plantation was to construct bunds built up to a height judged from the water level of the 1996 flood. In the year 2000 flood, the RM 1.4 million bunds were overflowed and damaged. The plantation, located in the middle reaches of the floodplain, estimated a damage cost of approximately RM 4 million for an area of 10,000 acres of young palms. The area was recorded as one of the plantations in the Kinabatangan most damaged by that year’s flood.

From an economics and risk perspective, the riverbanks of the Kinabatangan are clearly not ideal for oil palm cultivation. Land cost and crude palm oil prices are the two biggest factors that determine the profitability and returns on a plantation project. Internal rates of returns vary from 7% to 14% depending on various factors. With the unstable prices of crude palm oil prices at the moment, the high maintenance cost of plantation due to flood frequency are factors that should be considered.

**Human wildlife conflict**

Wildlife can damage oil palm plantations, involving mainly elephants. Because the remaining forest is fragmented, elephants are forced to move through plantations and smallholdings to get from one patch to another. They prefer to use forest on dry ground, so during floods they are also forced into agricultural land.
Some plantations have spent money on electric fencing, but some of the fences are not well constructed, and therefore are not effective in preventing crop damage. Existing fences have generally not been planned to channel wildlife movements between forest patches, but may cut across travel routes and exacerbate conflicts.

Habitat fragmentation has also affected the Orang Utan population and other species of high conservation priority (elephants, rhinoceros, monkeys, storm storks, oriental darters and others). Some individuals have become trapped in small, isolated pockets of remnant forest. Food shortages and the search for companions can force these animals to encroach into oil palm plantations.

The fragmented land parcels of the Kinabatangan Wildlife Sanctuary has created several bottlenecks for elephant movements. The five main bottlenecks have been identified including the road at Batu Putih, near Morisem Estate where a barrier of tyres has blocked their access to the adjoining forest area, at Malbumi Estate, and around Sukau and Bilit.

**Hydrology of the Kinabatangan**

Flooding is a common and natural occurrence in the Lower Kinabatangan floodplain. The river has a catchment of 16,800 km², almost a quarter of the state of Sabah, and a mean annual rainfall is about 3,000 mm. Today the floodplain regime is very much disturbed or affected by the rapid conversion of forested land to agriculture, and various threats and symptoms have began to surface. Research indicates that a one-week flood can sometimes remove or transport as much sediment as one year of normal flow. High levels of sediment in the water have particularly been reported at Bukit Garam, because monitoring is done there.
Frequent floods can be expected due to soil compaction and reduced infiltration in the catchment area. The frequency of floods may not have changed, but there is evidence that a given amount of rain now causes more severe damage. For example, the year 2000 flood reached higher levels than that in 1996, although total rainfall was less. Similarly on the Segama River, 140 mm of rain on 31 Jan 2000 contributed to a flood that peaked 2 metres higher than the flooded caused by 162 mm of rain on 19 Jan 1996.

Rainfall patterns may actually change very little. It is more likely that runoff generating potential will increase as land use changes continues. Therefore, for 300mm rain in 1920 may cause a 3m flood. The same amount of rain in 2000 may cause a 4.5m flood. Flood damage is proportional to the size of the flood and the land use on the floodplain. The 1996 flood was a more severe flood and yet the amount of damage was less because at that time there was less development in the floodplain.

Levels of pollution may still be considered an unknown factor. The one regular sampling point, at the intake for the Sandakan water supply, is upstream from many developments. There, sediments and phenols are reported as problematic. In the main river, however, the dilution effect is so great that chemicals within the water column may not reach detectable levels.

**Development of tourism in the Lower Kinabatangan**

Tourism is relatively new in the Lower Kinabatangan. Tourists started visiting the Lower Kinabatangan floodplain in small numbers, mainly to Abai, Sukau and Batu Putih, in the mid 1980s to see wildlife in its natural habitat. In 1991 the first tourist lodge was built, followed by another four lodges.

Today almost all the tourist lodges and similar activities are centred around one spot in the Lower Kinabatangan, namely the village of Sukau. The number of tourists has increased from a handful to thousands in a short span of about 5 years (Figure 3).

During peak seasons, about 2,000 tourists visit Sukau each month. There are on occasion more than 25 boats clustered on the one of the tributaries for wildlife viewing.
Overcrowding in Sukau is one of the major concerns that might lead to wildlife disturbance, damages tourism potential and eventually loss of nature attractions.

Up to now, tourism in the Kinabatangan has depended largely on private tour operators who have the necessary capital, expertise and manpower to set up and run tourism facilities. Operations are self-contained with each tour operator managing a tourist lodge, with all the basic amenities and staff strength to provide for an organised and well-planned tour itinerary for their tourists.

![Figure 3: Tourist arrivals to lower Kinabatangan](image)

Economic leakages are very high as local involvement either as employees or support service providers of fresh food supply, housekeeping and local guides remain low. Fresh food in Sukau is brought in from Sandakan, even by some of the villagers themselves, as local supply is unreliable.

Local communities, relevant government agencies and the private sector are not adequately integrated at present. Local communities are trying to get involved in tourism activities, for example through the setting up of a Cultural Troupe. However, their involvement in tourism is not that obvious. This may be due to lack of skills and working experience in handling tourists. Some younger generation prefer to move to town or city for other job opportunity and better salary.

Despite all the attractions of the area, nature tour operators are not investing in the Lower Kinabatangan for the long term. Findings attributed to two major factors, no certainty of the Sanctuary to be fully gazetted and also lack of infrastructure. This would lead to possible exploitation of natural resources.

Tourism trend is also influenced by natural disaster and phenomena. The drop in the number of visitors in 1998 was due to forest fires and haze. During flood season, lodges are closed for business.
**Why is this happening?**

There are several contributing factors to the present situation and may even deteriorate further if the unsustainable situations are not realised:

1) **Different government focus.**
   Encouraging monoculture in logged over forest. The decision making process in relation to land use is influenced and impeded by factors such as human resource deficiencies, lack of stakeholder involvement, political influence and insufficient data.

2) **Ineffective enforcement of the law to prevent environmental destruction**
   Example, riparian reserves, effluents discharge.
   More severe flooding is occurring because of increasing siltation caused by higher erosion rates. Clearing of riparian reserves, further enhance the problem.
   In addition, inappropriate flood mitigation measures are contributing to the overall severity of flooding. The oil palm and tourism sectors and other stakeholders have suffered economic losses.

3) **No enforcement on government policy for land development.**
   This is caused by ineffective land use planning and policies. This leads to severe destruction on terrestrial habitats too. Forests are degrading due to inappropriate logging practices, land clearing and inadequate enforcement of the law.

4) **Lack of education and environmental awareness for national financial institutions**
   Such as creditors and insurance companies.
   Due to lack of data and information on the ground, there is no enforcement of green investment criteria proposed for agricultural loan, let alone the suitability for agriculture development in the floodplain before such financial lending are approved.

5) **Lack of integrated management.** The non-integrated development among various stakeholders in the Lower Kinabatangan. As a result, this has led to improper land use management of the floodprone areas and loss of forest cover.

6) **No Common Vision!**
Chapter 3

What could happen if current trends continue?

If current trends continue, further loss of forest and fragmentation into smaller patches could result. This is likely to increase the vulnerability of the forest to outside disturbances—such as droughts and fire—and to increase conflicts with wildlife. Populations of elephants, orang utans, proboscis monkeys and other wildlife would become more fragmented into smaller patches of habitat, either forcing animal movement into cultivated land or resulting in loss of wildlife. Eventually, it will lead to population decline and finally local extinction.

If this occurs, it is likely to reduce the sustainability of the tourism sector. Businesses, which depend both on the existence of wildlife and tourists' perceptions of the environment, might find negative changes in both of these aspects. Loss of forest along parts of the river would perhaps lead to further concentration of tourism into the fewer remaining spots.

Loss of forest, wildlife and tourism opportunities, and increased monoculture cropping could lead to a decrease in the economic diversity of the area—reduced variety of jobs available, and increased the risk of depending on a single source of income whose market positioning is rather unstable at this moment. For whatever reason, local residents are not taking up job opportunities in commercial agriculture, and changes in land use could further restrict their employment in other sectors.

Flood damage is likely to increase, because the more investment placed within the flood-prone area (planted crops, infrastructure, road systems, bunding, etc.) the greater the monetary loss incurred when a flood comes.

Some plantations have erected bunds, but every bund which prevents flooding in one area will force the water into another area. For example, the more bunds that are built, the greater the likelihood of damage in areas that are not bunded and such areas could include villages.

The continuity of upstream activities, particularly commercial as well as illegal logging could further contribute to greater runoff and higher sediment load and siltation in the Kinabatangan River. Water quality will deteriorate if this persist and ineffective enforcement of the law to prevent destruction of forest cover, riparian reserves and discharge of effluents. In turn, high cost of raw water treatment and water shortages in Sandakan during periods of high turbidity and sediment load.
Chapter 4

Why a vision for the Lower Kinabatangan Floodplain?

Recent development trends in the lower Kinabatangan floodplain have benefited many sectors, but not all. The problems and worst case scenarios as described before are all potential problems that can be avoided. Each of them can have exciting solutions and open up opportunities. The Partners for Wetlands have a vision for development of the Kinabatangan floodplain. However, it requires the commitment of all major stakeholders to work as partners towards achieving a common vision for the Lower Kinabatangan floodplain.

The vision includes:

- A forest corridor along the Kinabatangan, connecting the coastal mangrove swamps with the upland forests, where people, wildlife, nature-based tourism and local forest industries thrive and support each other.

We envisage a connected zone of forest all the way along both sides of the river, from the mangroves near Abai to the upland forests near Segalilud Lakan. This forested zone would be not less than 500 m wide on both sides, and in many places wider.

Because plantations with crops planted on flood-prone land can lose money cultivating such areas, there is little to be lost and opportunities to be gained by allowing such areas to revert to forest. This would form the basis for re-connecting forest fragments. Based on several assumptions, it is thought that planters could set aside between 10% and 30% of the total estate area that may be unsuitable for oil palm for forest regeneration without jeopardising required rates of returns.

It is important too that the integrity of the proposed Kinabatangan Wildlife Sanctuary is protected to conserve the floodplain habitat, protect water quality, and create economic opportunities through ecotourism. The decision by the State government to gazette about 27,000 hectares of land as the Kinabatangan Wildlife Sanctuary to connect the various protected areas to form a forested corridor in the Lower Kinabatangan, will protect the product in which the tourism industry and the region depends on - wildlife in its natural habitats and local communities living around this protected area play an important role in maintaining the integrity of the sanctuary and its purpose with a fair share of the benefits in doing so.

The forest connections would create a zone where animal populations can move all along the river, from inland to the coast, without intruding into commercial agriculture. This should reduce wildlife conflicts. There is further scope for commerce by planting trees of native, swamp-tolerant species, to increase the tree cover with benefits to wildlife. This can be demonstrated through establishing a model sites for natural regeneration or plantation of native tree species for sustainable commercial use by the oil palm company in partnership with WWF Partners for Wetlands. The sites could reveal the mechanism and benefits on wise use of flood-prone land in terms of economics and conservation aspects.

These benefits—a continuously forested zone, and freely moving wildlife populations within it—should improve the sustainability of the tourism industry.

- A floodplain that supports a thriving and diverse economy that offers opportunity and choice to local people and businesses.
Ideally, tourism in the Lower Kinabatangan should be spread out along the river in order
to reduce congestion and disturbance to wildlife at any one spot. This will accord with
zoning in the District Development Plan and the Sanctuary Management Plan. Three
locations for tourism development are at Abai, Billit and Sukau; the types of
development should minimize impacts and avoid overcrowding.

Tourism products will be diversified in an imaginative way, including features such as
house-boats, elephant tourism, orang-utan tourism, agro-tourism and estuarine fishing.
Homestay tourism will develop in selected villages. Mass tourism is not appropriate in
the Lower Kinabatangan, and should be centred on towns such as Sandakan which act
as conduits and service centres to the more outlying tourist destinations.

Tourism developments in the Lower Kinabatangan will be based on sound environmental
principles, supported by technology for waste management, reduced power consumption
and other features. The emphasis will be on development of small, high quality
accommodation catering to high paying guests.

A model 'eco-lodge' will be initiated with partners to demonstrate ecotourism
development abide by standards, code of conducts and carrying capacity. The local
community should be as fully involved as possible in the development of tourism with
opportunities for ownership, management, training and capacity building. Taking into
consideration that ecotourism is the fastest growing form of tourism in Malaysia
averaging 35% per year and takes up 10% of the country’s revenue and under the
Eighth Malaysia Plan, the Ministry of Culture, Arts and Tourism, proposed to apply for
bigger allocations to implement ecotourism projects for areas earmarked under the
National Ecotourism Masterplan. Lower Kinabatangan is one of those areas. Hence, The
National Ecotourism Plan serves as an appropriate instrument within the overall
sustainable development of Malaysia and the economy as a whole.

Birds’ nests will continue to be part of the local economy. This depends on the
maintenance of a forested landscape, and appropriate cultural and management
practices.

Forest products will continue to be available for local use including building, consumption
and non-commercial use. Agro-forestry will help to maintain the supply of timber.
Service industries will be diversified. Many of these will be based in existing towns and
settlements that act as transport nodes, trade centres, and places for the development
of light industry.

Benefits to the community should include ownership of, and employment in, businesses
including tourism, agro-forestry and other ventures. Economic leakages from the district
should be reduced.

- Good environmental management of the natural capital on which all
  partners depend.

Land use planning will play a key role in setting the standards of future economic
development, based on a forested corridor all along the river, unbroken by clearance.
This landscape will be diversified, in line with the economic diversification that is
envisioned.

Environmental Impact Assessment will be one of the planning tools used to ensure
future good environmental management.
Management plans will be available for the Kinabatangan Wildlife Sanctuary and for the floodplain. These will harmonise with the District Development Plan, assist in zoning of activities, and contribute towards economic diversification. Good tourism management will contribute to the avoidance and reduction of environmental impacts.

Enforcement will be mutually beneficial between stakeholders in the various economic sectors, so that tourism, agriculture, forestry and other businesses can assist each other in minimising the monetary impacts of environmental disturbance.

- A landscape in which agriculture, people and nature conservation are united by their common source of vitality – water.

The river is the key element in the landscape. Structural change, which tends towards the deferment and accumulation of impacts, will be minimised so as to reduce monetary loss. The beneficial aspects of flooding (nutrient import, fisheries, flood regime of forest) will be maximised.

Economic benefits of river such as fisheries, tourism and water supply, will be enhanced. Restoration and maintenance of forest all along the river should help to re-create the functions of riverine reserves: reduction of surface flow containing sediment or chemicals, protection of river banks, and a reduction in the speed of flow of flood waters. They should also help to improve the quality of river fisheries (for example, by the input of fruits from riverside vegetation). A sustained water supply for towns will be assured, and treatment costs minimized.
ENVISAGED WILDLIFE CORRIDOR
FRAGMENTED WILDLIFE SANCTUARY & EXISTING FOREST RESERVE
Tourism vision of the Lower Kinabatangan Floodplain

- Abai
- Sukau
- Batu Putih
- Orang Utan
- Canopy walk
- Canopy Treking
- Bird watching
- Rhino
- Orang Utan Research Centre
- Proboscis monkey
How to make the vision work?

WWF's vision for the Lower Kinabatangan Floodplain is to provide long-term and sustainable future prospects for the economical, ecological and socio-cultural development of the area in this era. The vision provides achievable solutions for current problems, through possible win-win situations and is a base for future investments. It is therefore a source of inspiration for those who are interested and involved in the future of this area. WWF Partners for Wetlands invites partnership with major stakeholders to develop several workable solutions in order to achieve the overall vision.

In the recent Land Use Forum on the need for proper land use planning, stakeholders from the agriculture, government and business sectors have agreed on the recommendation for the development of a master plan for the management of the Lower Kinabatangan floodplains. With one voice, they have stressed that all stakeholders should be involved in the planning process. Decision-makers should be considered partners in this endeavour and they must be aware of the multi-faceted issues and problems in the Lower Kinabatangan. This marked the beginning of an integrated move from various stakeholders to acknowledge that a common understanding is required to achieve a mutually beneficial result for all parties in the long run.

On the proposal for the establishment of a wildlife corridor, representatives from the plantation industry were generally receptive to the idea and have expressed their willingness to give up land that are necessary for this purpose. However, as they have made considerable capital investments in the property, they would expect to be duly compensated.

The suggestions on river desilting and diversion of the Kinabatangan Riveras means to minimise flooding did not receive endorsement from the Forum participants. Instead, an integrated approach towards management of the water resources was recommended.

These are the various possibilities towards achieving the vision. It is the hope of WWF Partners for Wetlands that stakeholders and local communities to adopt this vision and continue to work towards a sustainable approach in order to prolong the ecosystem of this area to as natural as possible for Kinabatangan, A Corridor of Life!