COMMENTS FROM THE REVIEW PANEL/PUBLIC REGARDING TOR/SPECIAL EIA "SPECIAL ENVIRONMENTAL IMPACT ASSESSMENT FOR THE PROPOSED SINO-MALAYSIA JV FOREST PLANTATION AT KALABAKAN AND GUNUNG RARA FOREST RESERVES, TAWAU DISTRICT, SABAH"

BY 'INNOPRISE SYNERGY SDN BHD, LION MANAGEMENT SDN BHD AND FUXING PULP AND PAPER CO. LTD'.

No	Name (Organisation/Individual)	Issues/Comments	Clarification/Action Consultants/Project Proponent	Remarks
1.	Borneo Tourism Institute Sdn Bhd	EIA did not take into consideration of Tourism, particularly Ecotourism.	Ecotourism is not considered a key environmental issue as the core plantation area will not serve as a site for natural tourism. However, the SEIA will look into protected areas such as the gorge along the rivers, salt lick, forested hill slopes and the peaks above 2000 ft. These areas could be adapted for ecotourism purpose. These sites could supplement Maliau Basin and Danum Valley.	
2.	Borneo Tourism Institute Sdn Bhd	List of Consultants do not have any professionals with a strong background in Nature Tourism	Since ecotourism is not a key issue, an expert in this area is not critical. The Consultants will consult the Maliau Basin and Danum Valley Management Committees and review of available literature of the said areas.	
3.	Borneo Tourism Institute Sdn Bhd	Methodology specified in Socio Economics will not be able to compute losses in the ecotourism. Literature reviews on the subject of Nature Tourism, somehow related to Maliau Basin and virtually not the surrounding areas, in which the proposed Sino-Malaysia JV Forest Plantation will be located.	As indicated in the above comments, Maliau Basin is a significant conservation area adjacent to the proposed Sino-Malaysia JV project. As such, the SEIA will look into this Conservation area. The surrounding landuse are either oil palm plantations or commercial forest which do not have any tourist attraction. Hence the emphasis is to look at Maliau Basin and Danum Valley Conservation Areas.	Comment noted.

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4.	Borneo Tourism Institute Sdn Bhd	PRAs are forms of qualitative assessment that cannot be utilized concurrently with available data analysis at National Level, in relation to future management Nature Tourism.		Comment noted
5.	Borneo Tourism Institute Sdn Bhd	Further visits and discussions with government agencies would result biasness because Tourism is private sector led.	This may be a bias statement. Sabah Government's effort in promoting state tourism cannot be ignored e.g. the two conservation areas in Yayasan Sabah's management area (i.e. Danum Valley and Maliau Basin).	Noted
6.	Borneo Tourism Institute Sdn Bhd	It is misconception of Tourism suitability to assume that Sarawak's approach to Tourism (CAN – Culture, Adventure and Nature) can be adopted for Sabah. From this misconception, it is not surprising to find "Loss of Ecotourism opportunity" prior to indepth studies while the assumption is being made prematurely. There is no concrete suggestion, in regards to mitigation processes for the "Loss of Ecotourism Opportunity" in any consideration.	The concept of nature and culture is adopted from Regis P. and Malangking M. "An overview of tourism in Sabah Promoting Culture and Environmental Preservation in Sabah, 1990-2000, Ministry of Tourism Development , Environment, Science and Technology. As for adventure, it is an important key phrase used in the tourism industry to attract foreign tourist. The TOR is only a proposed scope of works for the SEIA and hence concrete suggestions from further detail study will only be addressed in the SEIA report not in the TOR stage.	
7.	The Royal Society, UK	Fire – danger of fire to the adjacent naturally managed and conservation forest.	This issue will be addressed in the SEIA which includes prescriptions on Fire prevention, detection & suppression.	Comment noted

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8.	The Royal Society, UK	Adequate Corridor linking Danum and Maliau – planned corridor along the River Kuamut is thus much too small and also vulnerable to fire and other disturbances.	In the "EIA for the Proposed Forest Harvesting Operation at Benta Wawasan Licence Area (2000- 2001), Kalabakan and Gn Rara Forest Reserves, Tawau District", area above Kuamut River (Region 10) has been recommended to be excluded from the Industrial Tree Plantation (ITP) and be managed under the Natural Forest Management (NFM). In fact, part of the policy statements of one of the Project Proponents, Innoprise Corporation Sdn Bhd., they did take into consideration buffer zones	
			along the conservation areas. For example, a 5 km buffer for Maliau Basin Conservation Area and a 1- km riparian reserve for Kuamut River.	
9.	The Royal Society, UK	Hydrological and river ecology consequences for Danum (SEIA to give particular consideration to protective measures).	SEIA will address the hydrological and river ecology of Kuamut River and impacts to Danum Valley.	Comment noted
10.	The Royal Society, UK	Hydrological, water quality and erosional concerns and their assessment and monitoring	These issues will be addressed in the SEIA.	Comment noted
11.	The Royal Society, UK	Biodiversity losses in the natural forest. SEIA might give consideration to strategies of incorporating some unlogged or natural regeneration areas and wildlife corridors within the overall plan so as to enhance the biodiversity of the plantation areas	of residual forested areas that are not subjected to heavy logging. In addition to provide in situ conservation, these sites will also provide the much needed mother trees for the future regeneration of the area. The linkage corridors among these	Comment noted

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		and reduce the total losses in biodiversity.	animals.	
12.	The Royal Society, UK	Fire – Plantation Management Plan on the plantation positioning and design, firebreaks and other fire mitigation and protection measures.	See Item no. 7 above. It is known that firebreaks have to be dependent on the existing belts of good forest. Heavy logged over sites with extensive secondary forest with dominance of a few species may not be efficient for this purpose.	Comment noted
13.	WWF Malaysia	Time Frame The time frame of each component of the project and the period covered by the SEIA should be clearly specified. Does the EIA cover the impacts of the operations including one cycle of planting, growth and harvesting per "forest farm" or up to a given year, or for an indefinite period? Remember that planting and harvesting will not be simultaneous in all the different parts of the total area.	 The timeframe of the project will be specified in the SEIA for major activities. The SEIA will cover the major activities such as the pre -development, development, operation as well as abandonment phases of the project. This SEIA is a planning tool for the Project Proponents. In order to manage the project over a long period of development, an environmental management plan (EMP) for the project shall be recommended. The EMP will prescribe timely action plan for each component of the developments and shall reflect the condition prevailing at the site at a specific time period. 	
14.	WWF Malaysia	Achievability of plans The SEIA should make some assessment of whether the plans can be realistically achieved or not. For example, a rapid growth cycle (planting to harvesting) is assumed.	The SEIA will assess the proposed development area of about 20,000 to 30,000 ha per year. Appropriate mitigating measures will be prescribed to ensure environmental protection.	Comment noted

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		 Very large areas per year are planned for clearing, maintenance and harvesting. If these cannot actually be achieved, or if there is reasonable doubt, this should be stated, and taken into account in assessing a) whether mitigating measures can be achieved; b) economic viability of plans. 	Once the Project Proponents undertake the Environmetnal approval conditions with the Environmental conservation Department (ECD), it is mandatory for the Project Proponents to implement the prescribed measures and at the same time to submit to ECD compliance monitoring report regularly to show the implemented mitigating measures. Economic viability of Forest Management Plan for clearing smaller plots will have to be borne by Project Proponents once prescribed in the SEIA.	
15.	WWF Malaysia	Socio Economic Assessment What are the economic impacts of soil erosion on water quality, flooding etc., within the project area, and downstream (villages may suffer from flooding through higher or more frequent peak flows; agriculture may suffer through flooding of crops; towns may suffer through flooding, higher treatment costs for potable water, etc.	The SEIA will address these issues. It should be noted that settlements downstream of the project site have been and are experiencing the impacts of logging activities as well as other land development projects nearby and upstream (esp. oil palm plantation and factories operating close to the rivers). The predominant problem raised by the villagers in Kalabakan and Kg. Brantian is clean water supply.	
16.	WWF Malaysia	What are the economic impacts and implications of foreign investment in the project, e.g. in the case of project abandonment: will there be funds to finance the measures proposed?	This issue will be address in the SEIA. Abandonment plan will specify monetary requirements / funds necessary to implement the relevant mitigation measures.	Comment noted

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17.	WWF Malaysia	Are the returns on investments adequate to finance mitigation measures?	This will be address in the SEIA.	
18.	WWF Malaysia	What are the economic impacts and implications of fire risk?	Fire - See reply to Item No. 7 above.	
19.	WWF Malaysia	What if the requisite area for planting could not be planted up in the specified time period? Would this undermine the economic viability of the project?	SEIA will discuss timing and achievability of targets. Yields from the plantations would be delayed if planting targets are not met. Minor delays would negatively impact the returns but it would likely still be viable. Major delays could undermine project viability.	
20.	WWF Malaysia	Can the required wood volumes be realistically expected from the areas to be planted? If a wood volume of about 3 million cubic metres per year (raw volume) were required, would this make the proposed mill dependent on illegally sourced timber from Kalimantan?	See Item No. 19 above. In other pulp & paper projects in the region, delays in achieving plantations goals have led to dependence on MTH wood supplies. Some of which may be sourced from illegal sources. e.g. Kalimantan. However, Sabah Softwoods Bhd may be able to supplement the shortage, if required.	
21.	WWF Malaysia	<u>Forest Ecology</u> What are the impacts of loss of lowland forest in the State context, rather than just in the project context?	SEIA will address the impacts of the loss of lowland forest in the State. The proposed project makes up about 9 percent of the total lowland Dipterocarp forest in the State. Hence, there will be an impact on the lowland forest of Sabah especially on the eastern portion of Sabah. It must be noted that a large part of the area is no longer pristine but dominated by	

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			secondary forest. (The total lowland forest area is about 2,577,062 ha – source Sabah Forestry Dept, 1997)	
22.	WWF Malaysia	Will the project undermine the work of other agencies e.g. Wildlife Department?	The SEIA will address the impact due to the development on the "wildlife district" as proposed and managed by the Wildlife Department, Tawau. (Note: this wildlife district is provisional conservation area, it is not permanent or a wildlife sanctuary) (Jumrafiah, per. com). As far as the Project is concerned, the Project Proponents will co-operate and complement the work with other agencies. If there are any conflicts, the SEIA shall address such issues for the best interest of all parties concerned.	
23.	WWF Malaysia	<u>Hydrology</u> How often will grab water sampling be carried out?	Water samplings will be carried out twice e.g. once during the dry period and once during the rainy period, if at all possible.	
24.	WWF Malaysia	Will it be frequent enough to assess peak storm flow conditions?	For peak storm flow conditions, data will be obtained from the DID stations at Kalabakan and Sg. Brantain.	
25.	WWF Malaysia	Will it be possible to assess extreme events, which are the main source of environmental impacts?	The extreme events will be one of the scenarios to be considered in the SEIA.	
26.	WWF Malaysia	Flood frequency analysis of 10 years return period seems to ignore the request of Department of Irrigation and Drainage (Appendix C, page 2)	The SEIA will also address the DID's request.	Comment noted

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		for 1:2, 1:5 and 1:100 year analysis. Wherever possible, real examples should be provided.		
27.	WWF Malaysia	<u>Terrestrial Fauna</u> Impacts on populations beyond the immediate project area should be assessed. If elephants are displaced from the project area, this will not only reduce the total population of elephants in the State, but will also fragment the remainder into smaller, possibly non-viable units. Would populations in or near Maliau Basin, Danum Valley and other areas continue to be viable or not? Would risk to them be increased?	 SEIA will assess the key indicator species and the impacts due to the development. E.g. habitat fragmentation and human-elephant conflict. The SEIA will look at the possible migratory route of elephant from Kinabatangan to Indonesian border via project site or boundary, if any. Appropriate mitigating measures such as exclusion of Region 10 from ITP is one of the provisions of continuous belt for the wildlife. The Proposed Project will definitely displace the present herds of wild elephants in the area. Their population is now being verified by both the WWF and the Wildlife Department. 	
28.	WWF Malaysia	Will potential conflicts between plantation and wildlife be assessed (e.g. elephant damage to newly planted seedlings? How will such conflicts be resolved? How much money will be needed for such conflict mitigation measures, and has it been budgeted for in planning?	Yes. SEIA will examine the potential human- elephant conflict. Based on the assessment, the consultants will put forward the mitigating measures including the cost to the Project Proponents.	Comment noted
29.	WWF Malaysia	Surrounding areas The SEIA should make clear statements about the risks and	SEIA will address this issue.	Comment noted

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		statements about the risks and sustainability of the surrounding areas such as Luasong, INNIKEA, SUAS, VJR and RIL areas. If it is considered that some of these areas will not survive, or risks will be increased, this should be stated.		
30.	WWF Malaysia	<u>Forest Fire</u> There should be a scenario approach, describing what will happen if a given area is burnt. What burnt area would make the project economically non- viable: half of one year's plantings? One entire year's plantings?	This aspect will be dealt with indirectly in the SEIA under risks. However there is no specific analysis of scenarios involving loss of large areas of plantation and its effect on project viability.	
31.	WWF Malaysia	What would the economic loss be, if fire spread from the plantation into the neighbouring dipterocarp forest?	With the small scale of protected sites within the project site any fires will be serious. The SEIA will further address this issue (see item no. 7).	
32.	WWF Malaysia	Additional mitigating measures should be recommended besides the "green break"	Yes, a comprehensive fire strategy will be outlined in the SEIA, including awareness, prevention, detection, and suppression actions.Management procedures for preventing any serious fire outbreaks will have to be strongly enforced. The SEIA will further address this issue.	Comment noted.
33.	WWF Malaysia	<u>Terrestrial Ecology</u> Demarcation of sensitive ecological areas will be demarcated. How will they be defined? Will they have a minimum size?	In terms of flora ecology, each protected site will have to be marked with buffer belts and rentise cut out along its perimeter. This will be specified in the SEIA. The size is determined by the existing	

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			topography and remaining vegetation. All sites with gradient above 25 degrees will be protected.As for wildlife, a minimum size riparian reserve will be address in the SEIA.Besides, the SEIA will look at key indicators species and thus their home range which will give a rough idea of the area required.	
34.	WWF Malaysia	Notification to the Director of the Sabah Wildlife Department – require by every annual coupe.	Since the project area will be developed in phases and by region, one of the Project Proponents' subsidiary, Rakyat Berjaya Sdn Bhd will take the sole responsibility to inform the relevant Department of the development plan.	Comment noted
35.	WWF Malaysia	Terrestrial Fauna Ecology Amendment of wordings "The evaluation will be based on the available literature, habitat and distribution maps (including wildlife management plan from the Sabah Wildlife Department and using information from collaborative projects as well as projects run by organizations such as IKEA, HUTAN, SOS Rhino and WWF), vegetation maps from the flora ecologist, aerial surveys as well as ground truthing to look into the potential wildlife corridors or sanctuaries"	Noted and will take into consideration during the SEIA study.	Comment noted

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36.	WWF Malaysia	Procedures Annual check on performance-based	The SEIA will address this issue.	Comment noted
37.	WWF Malaysia	Locate certain percentage of the plantation at Kudat to reduce pressure at Kalabakan	It is difficult to ascertain that Kudat's area is of less pressure e.g. land could be an issue. Besides, transportation economics would have to be looked into.	
38.	WWF Malaysia	Locate a small pulping plant in Kudat	Based on the Project Proponents' preliminary site assessment, reliable water supply in Kudat area could be a problem.	
39.	WWF Malaysia	Proposed mill could be relocated to intermediate and less sensitive area	At the moment, the exact location of the mill is unknown. Therefore it is too early to assess the sensitivity of the mill site. Besides, a detailed EIA is envisaged to be carried out for the pulp mill and alternative site will be part of the assessment.	
40.	WWF Malaysia	<u>Corridors and buffers</u> Sg. Imbak Valley running between Danum Valley and Kuamut river is particularly rich in wildlife including orang-utans and elephants – important focus for consideration of corridors and buffers.	Refer to Item 8 above. In the "EIA for the Forest harvesting of the Benta Wawasan Licence Area (Coupes 2000-2001), Kalabakan and Gn Rara Forest Reserves, Tawau District", the study has recommended the area north of Kuamut River to be managed under Natural Forest Management (NFM) instead of Industrial Tree Plantation (ITP). This is to protect the rich wildlife biodiversity in the area.	
41.	Andrew Lee	Project justifications Kalabakan and Gn Rara Forest Reserves vs. Kudat	The SEIA will address this issue.	

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42.	Andrew Lee	<u>Cost / benefit of NFM vs ITP</u> (inc biodiversity, wilderness, ecotourism, carbon sink and climatic values as well as externalities)	The SEIA will address this issue. In fact, the direct quantifiable benefits of wood production, carbon sink and climatic values will be analysed. Analyses of biodiversity and wilderness values are difficult to quantify and therefore are dealt with in a qualitative manner.	
43.	Andrew Lee	Economic cost/benefits of having a second pulp and paper mil in Sabah	This is not within the scope of this SEIA.	
44.	Andrew Lee	What are the potential economic losses in terms of damage to ecotourism in Sabah when natural tropical rainforest will be destroyed on a huge scale, affecting globally high profile critically endangered species like the Sumatran Rhino and Orang utan?	Ecotourism depends on the available forest and creatures living in it. Any decline in natural forests or loss of habitat has direct effect on ecotourism. Maliau and Danum will not be disturbed by the project and will still attract eco-tourists.	
45.	Andrew Lee	A plan to evaluate the effect of the proposed project on the reputations of internationally known projects which will be directly or indirectly affected by the project.	SEIA will look into this issue.	
46.	Andrew Lee	Corridor / Buffer north of Sg. Kuamut.	Please refer to Item nos. 8 and 40 above.	
47.	Andrew Lee	Project Status – was the EIA for the Proposed Logging Operation for Benta Wawasan Licence Area (Coupes 2000-2001) made available to the public for viewing? If not, why not?	It is available for the public from the Environmental conservation Department. But it was not advertised of its availability as it is a Normal EIA and the procedure for a NEIA does not include public participation.	

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48.	Andrew Lee	Site Clearing and preparation - Removal of biomass There should be a no burning policy. But 4.2.5 states "prescribed burning may be required during the maintenance phase"	The statement 4.2.5. stated that prescribed (or controlled) burning may be required to reduce accumulated forest litter that could be potential fuel for forest fires. The mitigating measure of controlled burning may be used to reduce the risk of fire. This practice has been widely adopted in Canada and the Australia with success. Burning would be limited to small-scale burns at the time when rain has started or just before it is expected. It would not occur during "haze" conditions. All mitigating measures will be studied and recommended in the SEIA study	
49.	Andrew Lee	<u>Abandonment Phase</u> It is well known that it is impossible to "rehabilitate" natural forest in areas which have been clear felled. If the project was abandoned, due to the very high risks of fire, for example, how would this rehabilitation be attempted? Who would pay for it? How long would the "rehabilitation" be carried out?	This matter is addressed in the SEIA by prescribing revised scheduling of clearing. Clearing should not to proceed too far ahead of planting to avoid the high erosion risks of clearing and then abandoning. Project abandonment will also be covered in the SEIA study.	
50.	Andrew Lee	<u>Hunting activities?</u> – The TOR must study detailed ways of stopping hunting, including what is the additional manpower needed, what training is involved and who is going to pay for it. Can the level of control realistically be maintained for	Hunting activity is normal for the rural populace. It is one way of supplementing their protein intake. Some hunt to sell for a livelihood. Nevertheless, the SEIA will further address this issue.	

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		the whole project period? Is this figured into the cost/benefit analysis?		
51.	Andrew Lee	What is the meaning of "Conservation programme" for rare aquatic habitats in 4.2.2.2.2? This needs to be more specific. Does this include coral reefs in Cowie Bay?	The TOR aims at providing the scope of works for the study. Therefore the "Conservation Programme" will be elaborated in the SEIA report. The study will look at the impact due to siltation into the Cowie Bay. One must note that the nearest identified coral reefs are at least 25 km from the river mouths of the Bay. Currently the Bay is noted to be highly turbid and impacts may have affected the reefs already.	
52.	Andrew Lee	What is the minimum size of "sensitive area" (4.2.3)? How will they be demarcated in the field? How often will they be monitored and by whom? Is this included in the economic assessment	The sensitive areas will have to be demarcated as mentioned in Item no. 33 above. Their sizes are	
53.	Andrew Lee	How many enforcement staff / officers will be needed to carry all this out?	TOR is only proposed scope of works, and details will be covered in the SEIA report.	
54.	Andrew Lee	Regular fauna survey of the project areas prior to logging should be stipulated, as displaced animals may have newly moved into the area.	This issue is cover under Section 38 of Wildlife Conservation Enactment 1997.	Noted.
55.	Andrew Lee	Regular check by Police	The SEIA will look into monitoring by relevant authority such as Wildlife Department, Army	Commentnoted.

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			Personnel, the Project Proponents, Fire Brigade and including Police.	
56.	Andrew Lee	What is the "edge effects" or "island effects" which occur in small isolated patches of forest and the resulting non-viability of trapped populations.	The SEIA will look into this issue. The standard problems of island populations will be inbreeding resulting in narrowing of genetic variability. The next possibility is the difficulty of ensuring continuous reproduction in some plants. The links specified among small patches of protected sites are techniques of assisting in this problem.	Comment noted.
57.	Andrew Lee	If all the trees being planted are Acacia, then disease or fire is a very real scenario. The TOR should address who would be responsible for mitigation of any damage to the natural forest, for how long and its costs. Have these costs been included in the cost/benefit analysis of the project?	The SEIA will address the problem. Refer to Item no. 7 above too. The responsible party will be the Project Proponents. The costs of disease and insect surveys and treatment as well as fire prevention, detection and suppression measures are part of the operating costs which will be used in Cost/Benefit analysis of the project.	Comment noted.
58.	Andrew Lee	The TOR should include the economic analysis of foreign workers and outflow of money from Sabah.	The SEIA will address this issue.	Comment noted
59.	Andrew Lee	Dust monitoring need to be carried out for more than 24 hours.	At the moment DOE's requirement is 24 hours monitoring. ECD, on the other hand, does not specify the duration but wherever compliance is required, ECD will decide. In a forested project like this one, dust pollution is	

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			confined to its immediate vicinity only and is not a key issue.	
60.	Andrew Lee	An analysis of increased vehicle use of the roads should be included. The amount of vehicular traffic in the vicinity of Tawau town or suburbs would surely increase if the proposed pulp and paper mill is located in Tawau (as stated in 2.2)	The TOR will only assess the tree plantation and another EIA will be carried out for the proposed pulp and paper mill.	
61.	Andrew Lee	Where are the results of the investigation of the existing forest plantations in Sabah?	The TOR mentioned the consultant evaluated the existing plantations and thereby come to conclusion of the key impacts due to these plantations which could affect the project. This is a TOR not full report SEIA yet.	
62.	Andrew Lee	Assessment of fertilizers and other chemicals (which are known to cause plankton blooms among others) in the sea in Cowie Bay should also be included.	The volumes of fertilizers are not known at this stage but it is expected that for Forest Plantation only minimal volumes of fertilizers will be used. It is worthwhile to note that there are sizeable oil palm plantations located south of the proposed project where agrochemicals input is essential and their impacts cannot be ignored too.	
63.	Andrew Lee	Mitigating measures mentioned in Page 11 are inadequate.	This is a TOR and not a full SEIA, therefore mitigating measures mentioned are just a preliminary assessment. The ECD will "stipulate" and "enforce" these measures in the Agreement of Environmental Conditions (AEC) for this SEIA.	

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64.	Andrew Lee	The effects not just of the logging on the hydrology of the region, but also of the subsequent clearing-felling and biomass removal, planting and repeated logging and re-planting should be looked into.	This issue will be examined in the SEIA.	Comment noted
65.	Andrew Lee	It is alarming to see the words "recommended" and "suggested" in terms of mitigation measures which will be in the EIA. Shouldn't these be "stipulated" and "enforced"? or are the measures in the SEIA only carried out at the discretion of the developer?	EIA is a planning tool not an enforcement device. The Sabah Environmental Conservation Department (ECD) is the Department who has the authority to enforce the mitigating measures. The consultants only assess and put forward recommendation.	
66.	Andrew Lee	<u>Fauna</u> Study should include coral reef communities in Cowie Bay.	See Item 51 above. Nearest identified coral reefs are at least 25 km from the river mouths of the Bay.	
67.	Andrew Lee	TOR should include studies on reptiles and amphibians, not just mammals and birds.	Secondary data on reptiles and amphibians are very limited. The study of these animals requires longer duration e.g. years. To obtain reliable information, postgraduate students should be encouraged to undertake studies on reptile and amphibian.	
68.	Andrew Lee	TOR makes no reference to elephant conflict and its mitigation; elephants are known to cause damage to Acacia seedlings. How much money would be available for the necessary conflict	SEIA will look into the human-elephant conflicts and the relocation cost.	

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		mitigation for such a huge area and for how long? Has this been taken into account in the economic viability studies for the project		
69.	Andrew Lee	There are many species of animals that are not able to "migrate" long distances to the so-called corridors or sanctuary areas proposed, or are too far from them. How does the TOR propose to deal with this issue.	Section 38 of the Wildlife Conservation Enactment 1997 has spelled out the provision for rescue operation.	
70.	Andrew Lee	The TOR should include analysis of whether the forest corridors are in fact already "full" of animals or whether the corridors are even suitable?	To study the forest corridors is outside the scope of the SEIA. However, based on secondary data typical wildlife composition in the recommended corridor can be inferred. The forest can be assessed via aerial survey. Seeing many orang-utan nests during an aerial survey can indicate abundance of the species in this area. The SEIA will further address this issue.	
71.	Andrew Lee	Translocation is not an option for certain animals, comment.	Translocation is an option for all animals. The SEIA will further address this issue.	
72.	Andrew Lee	Protection of salt licks: while this is essential, there is no point in conserving them if the animals can't get to them. How would these crucial sites be linked up with other substantial areas of natural forest? How would they be demarcated? How	This issue has been studied in the "EIA for the Proposed Forest Harvesting Operation at Benta Wawasan Licence Area (2000-2001), Kalabakan and Gn Rara Forest Reserves, Tawau District" In fact, one of the Project Proponents, ICSB has already demarcated 2,000 ha around the salt licks	

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		often would their protection be checked and by whom? What would be the action taken if they were destroyed?	and linked it to the Luasong Forestry Centre. As part of the Environmental approval conditions, the ICSB will submit regular compliance monitoring report to the Environmental Conservation Department on the implemented measures. ECD will carry out spot check and any infringements will be taken up by the ECD. The SEIA will address this issue.	
73.	Andrew Lee	Green House Effect Emphasis should be given to investigate the value of the same area of natural forest as a carbon sink.	This issue will be addressed in the SEIA.	Comment noted
74.	Andrew Lee	TOR should consider modeling to predict local climate change, including how this would affect the people of Tawau	Climate change is a regional and global scale phenomenon. As such the scale of this project in comparison to regional and global scale is very small. Any climate changes if affected will be mast by the diurnal changes, seasonal patterns and inter- annual variations. However, climatic parameters such as ambient air temperature and rainfall will be measured regularly at the project site to monitor any local climate change. The SEIA will address this issue.	
75.	Andrew Lee	Planting Schedule Is this really feasible? Are such large areas really needed to feed the mill?	The SEIA will address this issue.	

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		What will happen if there is a short fall?		
76.	Andrew Lee	TOR should include plans for detailed calculations of how many workers would be needed to carry out such massive planting regime.	The SEIA will estimate labour required for plantation development, harvesting, etc. and contrasts these with the same area under natural forest management.	
77.	Andrew Lee	How the project can justify removing 240,000 ha of some of Sabah's rarest habitat, lowland dipterocarp forest, to make pulp and paper?	The SEIA will address this issue. This issue will be addressed in the SEIA.	
78.	Andrew Lee	Why is SSSB converting to oil palm?	This is outside the scope of works of this SEIA.	
79.	Andrew Lee	What about Indonesia undercutting the prices?	This is outside the scope of works of this SEIA.	
80.	Andrew Lee	Why has SFI has so many problems with replanting success, biodiversity and land degradation, river sedimentation and fire?	This is outside the scope of works of this SEIA.	
81.	Andrew Lee	Who would provide the funds for post SEIA monitoring?	Normally it is part of the approval conditions from the ECD to the Project Proponents to submit regular compliance monitoring report. Hence the Project Proponents will have to implement the necessary task required.	
82.	Sabah Environmental Protection Association (SEPA)	Project Finances This project be controlled through an escrow account managed by the Ministry of TED, WWF and other NGOs.	This is outside the scope of works of this SEIA.	

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83.	Sabah Environmental Protection Association (SEPA)	Development Plan The Plantation Forest should have a detailed and clear-cut development Plan	This will be addressed in the SEIA.	Comment noted
84.	Sabah Environmental Protection Association (SEPA)	<u>Feasibility and Cessation</u> If at any time during the project it is envisage that due to dire consequences the project should not continued – will a decision to the effect be forthcoming forthwith without "Cost of compensation" used as an excuse to continue with it? Will profits take precedence over people?	This will be addressed in the SEIA.	
85.	Sabah Environmental Protection Association (SEPA)	Independent Monitoring (and enforcement)	This will be addressed in the SEIA. Refers to Section 4.3 in the TOR where Independent or external consultant have been suggested.	
86.	Sabah Environmental Protection Association (SEPA)	Alternative site or site option.	This will be addressed in the SEIA.	
87.	Sabah Environmental Protection Association (SEPA)	Was any study done to gauge the feasibility of constructing several pulp plants in different areas and a central paper mill in a less pristine area?	This SEIA is to address the Forest plantation not the pulp mill. Another SEIA will be carried out for the pulp mill once the plan is developed.	
88.	Sabah Environmental Protection Association (SEPA)	EIA to study viability of the Paper Mill Project and carrying capacity of the state in supporting such a massive project which will replace natural	See Item No. 87 above. This issue will be addressed in the EIA for the pulp and paper mill.	

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		forests with plantation forest.		
89.	Sabah Environmental Protection Association (SEPA)	A detailed environmental cost-benefit analysis of the project should be carried out.	This issue will be address in the SEIA.	Comment noted.
90.	Sabah Environmental Protection Association (SEPA)	EIA should include damage to the eco-tourism industry and environmental effects of the project on the population living down river.	Refer to Items no. 1, 2, 3, and 5. Environmental effects of the project on the population living down river would be addressed in the SEIA.	
91.	Sabah Environmental Protection Association (SEPA)	A separate study should be undertaken on the project's effect on the State's Ecological Treasures – Maliau Basin and Danum Valley.	This is outside the scope of this SEIA.	
92.	Sabah Environmental Protection Association (SEPA)	EIA should look into and come out with exact figures as regards to how much of the area has been clear- felled earlier without an EIA and the effects of such actions to the surrounding Environment – water quality, soil erosion, flora, fauna etc.	SEIA will address these issues.	Comment noted
93.	Sabah Environmental Protection Association (SEPA)	Manpower	The SEIA will estimate manpower requirements of the forest plantation. The sourcing of this manpower will be investigated.	
94.	Sabah Environmental Protection Association (SEPA)	What would be the resultant effect on the people and the State with the presence of such a large number of foreigners – security, health, social	With or without this project, the people and the State of Sabah is already facing the impacts due to the presence of large number of foreigners. The size and type of in-migration can cause a number of	

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		services such as medical, education etc?	social impacts including placing additional demands on availability of accommodation and a range of existing local services such as education, health and recreational facilities, police and emergency services as well as demand for power, water and telecommunication facilities. Nevertheless, these issues will be discussed in the SEIA.	
95.	Department of Environment	Apakah kawasan projek telah habis dibalak dan kerja-kerja pembersihan telah dijalankan.	Refer to Item no. 47.	
96.	Department of Environment	Laporan TOR khas bagi projek ini dicadangkan supaya diperkemaskan dengan mengadakan satu tajuk mengenai "existing environment" yang merangkumi perkars-perkara "physical-chemical environment", "biological environment" dan "human environment". Didapatai laporan TOR ini melaporkan maklumat-maklumat mengenai keadaan alam sekitar di bawah tajuk "Key Environment Impact"	The existing environment was described in relation to the key impacts identified, in line with the ECD's format.	
97.	Department of Environment	Environmental Management Plan a) assignment of responsibilities for planning, execution and management of environmental requirements and mitigation actions identified.	The SEIA will follow the guidelines as stipulated by the ECD.	

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		 b) Programme of environmental monitoring, audit, review and improvement 		
98.	Department of Environment	Residual Impacts a) Identification of residual impacts and their significance. b) Recommendations for their management	The SEIA will look into the compliance requirement by the ECD. The SEIA will address the residual impacts and management in the compliance monitoring as stipulated in the ECD guidelines.	
99.	Kementerian Pelancongan, Alam Sekitar, Sains dan Teknologi (Ministry of Tourism, Environment, Science and Technology)	Pihak Kementerian telah membuat sedikit penelitian mengenai dengan SEIA untuk perkara diatas dan berpendapat bahawa suatu lawata n tinjauan bersama ke kawasan tersebut dapat dibuat kerana kita memerlukan kedudukan sebenar pelaksanaan projek penanaman semula kawasan ini.	Comment noted.	Noted.
100.	Kementerian Pelancongan, Alam Sekitar, Sains dan Teknologi (Ministry of Tourism, Environment, Science and Technology)	Garis panduan dalam SEIA adalah cukup lengkap, akan tetapi pelaksanaan juruperunding mengendalkian metologi mereka perlu diawasi sentiasa. Mengikut pengalaman saya di Sabah Forestry Industry, projek yang serupa telah dilaksanakan tetapi gagal dan kerajaan serta Sabah Forest Industry menanggung kerugian membayar iuruperunding tanpa hasil yang	This is beyond the scope of works of this SEIA, as the concerns are more relevant during implementation stage i.e. after the SEIA has been approved.	

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		berfaedah. Pengalaman ini harus dijadikan ikhtibar.		
101.	Jabatan Pengairan dan Saliran Inanam (Department of Irrigation and Drainage)	Berdasarkan kepada laporan tersebut, kawasan projek akan melibatkan hampir keseluruhan kawasan tadahan Kalabakan, Brantian dan Kuamut. Adalah perlu diambil maklum bahawa Sg. Kuamut merupakan antara anak sungai utama bagi Sg. Kinabatangan.	The percentage of the project area that lies within Sg. Kinabatangan is only less than 9 percent. However, the impacts to Sg. Kuamut shall be addressed in the SEIA.	Comment noted.
102.	Jabatan Pengairan dan Saliran Inanam (Department of Irrigation and Drainage)	Memandangkan projek ini melibatkan satu kawasan yang amat luas dan meliputi hampir keseluruhan kawasan bagi tiga (3) buah sungai maka kesannya terhadap kawasan-kawasan tadahan terutama sekali dari segi "base flow", larian air permukaan (surface runoff) dan "sediment transport" sungai adalah amat besar. Larian air permukaan dan "sediment transport" merupakan antara faktor- faktor yang berupaya untuk memberikan kesan yang ketara terhadap perubahan system geomorfologi sungai.	Issues on "base flow", surface runoff and sediment transport shall be addressed in the SEIA.	
103.	Jabatan Pengairan dan Saliran Inanam (Department of Irrigation and Drainage)	Di dalam laporan tersebut, dinyatakan bahawa terdapat penempatan (settlement) di kawasan hilir Sungai Kalabakan dan Sungai Brantian termasuklah Teluk Cowie. Adalah	As mentioned earlier, the proposed project site only has 9 percent of its area in Sg. Kinabatangan Catchment. As such, the impact is expected to be not significant as the area will be re-vegetated. Nevertheless, this will be addressed in the SEIA.	

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		perlu dimaklumi bahawa projek ini akan memberikan kesan tehadap Sungai Kinabatangan juga. Oleh itu, adalah perlu agar penempatan id bahagian hilir Kinabatangan turut sama diambil kira.		
104.	Jabatan Pengairan dan Saliran Inanam (Department of Irrigation and Drainage)	Di bawah "Hydrology Impacts" laporan tersebut, penekanan banyak diberikan terhadap aspek banjir. Walaubagaimanapun, perlu dimaklumi bahawa kesan projek ter hadap "base flow" sungai-sungai adalah tidak kurang pentingnya.	Base flow aspect shall be addressed in the SEIA.	Comment noted.
105.	Jabatan Pengairan dan Saliran Inanam (Department of Irrigation and Drainage)	Berdasarkan kepada laporan tersebut, dinyatakan bahawa pengumpulan sedimen (sediment accumulation) di kawasan teluk dan muara sungai akan diambil kira. Akan tetapi, adalah perlu dimaklumi bahawa pengumpulan sedimen juga akan berlaku di sepanjang laluan sungai dan kesannya terhadap system geomorfologi sungai akan lebih ketara apabila disertai dengan aliran tinggi (high flow)	To study the changes in river geomorphology, detail information on the flow regime and cross-sections of the river has to be carried out 'before' and 'after' project development. In addition, long term rainfall and discharge measurements are required. One good recommendation is to install hydrological and cross-section monitoring stations along the river so that future impacts could be closely monitored.	
106.	Sahabat Alam Malaysia	Purpose of the SEIA The SEIA uses SFI and SAFODA as indicator for the assessment and the area is only 10 percent of the	The SEIA looks at the planted area of SFI which is only 35,075 ha. However the actual SFI project area is only 289,000 ha, which is almost equal or	

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		proposed project size is simply performing the wrong unit of analysis	bigger than the proposed project. As mentioned, the use of SFI and SAFODA is just an indicator. Detail of the site study will be based on ground surveys and evaluation.	
107.	Sahabat Alam Malaysia	Soil Erosion Study of nutrient cycle into the impacts of logging and planting schedules and harvesting and clear felling on the soil properties.	This aspect is the subject of an ongoing research by the Project Proponents in the project site.	
108.	Sahabat Alam Malaysia	Leaf litter of pulpwood trees themselves contains tannin, lignin, oils, waxes and other substances that are difficult to digest or even toxic for soil flora and fauna. Thus in plantations, many decomposers that are not able to adapt will simply disappear and as a result of this, the leaf litter will decomposed slowly, accumulating on the soil.	The SEIA will address this issue.	
109.	Sahabat Alam Malaysia	Flora Ecology Assessments on the impacts due to the establishment of monoculture tree stand to the natural environment must not only include the invasiveness of the intended plantation species but also how:	The species selected <i>Acacia</i> is a secondary species in its natural habitat in Australia requiring high light exposure. It is able to regenerate rapidly in disturbed sites especially after a fire in Queensland northern belt. If the natural vegetation in the forest with the closed canopy is not dsturbed or cleared invasion will be minimal. Opening like roads are the opportunity for Acacia invasion.	

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110.	Sahabat Alam Malaysia	New diseases and pests that did not exist in the plantation area may begin to affect native vegetation and wildlife.	The SEIA will address this issue.	
111.	Sahabat Alam Malaysia	The plantation may alter the ecological balance among different fauna species in the area, in particular to the prey and predator animals' population as species benefiting from plantation may increase in number and those harmed by it will drastically decrease. Imbalances generated by plantations affect a very wide group of species, from soil fauna to large mammals.	Plantation will attract some species but their diversity and abundance are poor. The SEIA will further address this issue.	
112.	Sahabat Alam Malaysia	Agrochemicals The impacts of the usage of agrochemicals on soils, waterways, atmosphere, plant, wildlife and people.	This subject will be discussed in the SEIA under plantation and nursery development and operations.	
113.	KL Ho	Spreading of fire from the plantation to the surrounding natural forests	See item no. 7.	
114.	KL Ho	How to prevent forest with ground slope of more than 25 deg from being clear-cut?	Demarcation of areas above 25 deg slope prior to logging will be prescribed as a mitigation measure in the SEIA. Fines as well as stop work orders may be incorporated in the SEIA.	
115.	KL Ho	How to stop animal hunting activities	Hunting activities will be addressed in the SEIA.	

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		by those workers / VIP's from outside?	There is a provision in the Wildlife Conservation Enactment 1997 to prevent outsider from hunting in areas belonging to any individuals or organizations. A total or permanent closure of logging roads must be done within the coupes. The Wildlife Department has designated certain areas as hunting areas. Hunting with valid license can also be done in state lands and plantations if permission is grant by landowners. VIP hunters are difficult to control. The best method	
			to control them is to ensure access within the property is not conducive to 4WD such as blocking the roads with logs or roads that are impossible to drive through.	
116.	KL Ho	What shall happen to the logs which are too good just to be fed into the Pulp mill?	They are sold to ICSB's sawmills or to outside log market. The project entails logging, clearing and planting Acacia pulpwood plantations. The mill will begin only after 3-4 years of plantation establishment. This development concept is different from the SFI's plantation where the mill uses pulp wood from harvesting natural forests.	
117.	KL Ho	What is going to happen to the water supply to Tawau in the future of the catchment areas are destroyed.	The water catchment for Tawau is within Tawau Hill, which is a Class I forest Reserve, i.e. presently a conservation area. The Proposed Project Area is located outside this catchment.	

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118.	Wildlife Department	On page 16, there are some misleading formulations in Section 4.1.2.1. In the 5 th line of this section the reader is given the impression that the Maliau Conservation Areas does not hold the same kind of protection status as the Danum Valley Conservation Area. As far as we are informed these two areas have the same protection status.	The paragraph or statement is not intended to mislead any reader. Both Maliau and Danum Valley are important conservation areas.	
119.	Wildlife Department	In the same section one is given the impression that Danum Valley and Maliau Basin both consist of lowland rainforest and are very important habitats for threatened species such as Sumatran rhino, orangutans etc. This is the case for Danum Valley, while the Maliau Basin's values may be its scenic qualities, flora etc.	No. Danum Valley is of lowland rainforest while Maliau Basin is of different vegetation. Nevertheless, the emphasis for SEIA is to present the important of these two Conservation Areas that justify protection.	
120.	Wildlife Department		This SEIA will look into other FMUs surround the project site.	Comment noted.

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		Sabah is outside protected areas and it is important that these resources are acknowledged and taken into consideration in major EIAS.		
121.		The need for such a more comprehensive approach becomes evident when it is suggested on page 24 (first bullet in Section 4.2.2.1) that there should be established wildlife corridors or sanctuaries between each of the two conservation areas and the project site. Maybe what is meant is that there is a need for buffer zones and for landscape linkages generally, which gives good meaning. However, as this section is formulated, it seems that corridors should provide for movement from the protected areas and into the project area and vice versa. This wouldn't be likely nor preferable.	to provide continuous belt of green between the conservation areas as well as other natural forest	