CONVENCIÓN SOBRE EL COMERCIO INTERNACIONAL DE ESPECIES AMENAZADAS DE FAUNA Y FLORA SILVESTRES

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Septuagésima octava reunión del Comité Permanente
Ginebra (Suiza), 3 – 8 de febrero de 2025

Cumplimiento

Examen del comercio significativo de especímenes de especies del Apéndice II

APLICACIÓN DE LAS RECOMENDACIONES DEL COMITÉ DE FLORA

1. Este documento ha sido preparado por la Secretaría.

2. El presente documento consta de dos secciones, como sigue:

   a) En la sección 1 se presentan los progresos realizados en la aplicación de las recomendaciones del Comité de Flora para ocho combinaciones especie de flora/país que deben ser objeto de informe en la presente reunión o para las que se dispone de información actualizada desde que se decidió mantenerlas en la fase 2 del proceso en la 27ª reunión del Comité de Flora (PC27; Ginebra, julio de 2024). Esta información se presenta de conformidad con el párrafo 1 de la Resolución Conf. 12.8 (Rev. CoP18), que se refiere a la aplicación del Artículo IV; y,

   b) La sección 2 recoge información relativa a cuestiones específicas no relacionadas con la aplicación del Artículo IV identificadas por el Comité de Flora en la reunión PC27.

Sección 1. Aplicación de las recomendaciones del Comité de Flora

3. En el anexo al documento SC78 Doc. 34.1 sobre *Visión general del examen del comercio significativo de especímenes de especies del Apéndice II*, la Secretaría enumera 16 combinaciones especie/país para especies de flora que deben ser objeto de informe en la presente reunión o para las que se dispone de información actualizada desde que se decidió mantenerlas en la fase 2 del proceso en la reunión PC27.

4. De estas, se informa sobre las ocho combinaciones *Pterocarpus erinaceus*/país, seleccionadas con carácter excepcional en el proceso de ECS, en el documento SC78 Doc. X.2 sobre *Aplicación acelerada del Artículo XIII para todos los Estados del área de distribución del palo de rosa (*Pterocarpus erinaceus*) de África Occidental*.

5. Las ocho combinaciones restantes especie de flora/país incluidas en el ECS son el objeto de esta sección del presente documento:

   - Congo/*Pericopsis elata* (seleccionada después de la CoP17)
   - Guinea Ecuatorial/*Guibourtia tessmannii* (seleccionada después de la CoP19)
   - Indonesia/*Aquilaria malaccensis* (seleccionada después de la CoP19)
   - Malasia/*Aquilaria malaccensis* (seleccionada después de la CoP19)
   - Mozambique/*Dalbergia melanoxylon* (seleccionada después de la CoP19)
   - Nicaragua/*Dalbergia retusa* (seleccionada después de la CoP17)

- República Unida de Tanzanía/*Dalbergia melanoxylon* (seleccionada después de la CoP19)

- República Unida de Tanzanía/*Osyris lanceolata* (seleccionada después de la CoP19)

6. De conformidad con el párrafo 1 l) de la Resolución Conf. 12.8 (Rev. CoP18) sobre *Examen del comercio significativo de especímenes de especies del Apéndice II*, la Secretaría informa en el presente documento al Comité Permanente acerca de su evaluación sobre si las recomendaciones formuladas por el Comité de Flora han sido aplicadas por el Estado del área de distribución correspondiente. En la presente sección se resumen los diferentes casos y en el anexo 1 del presente documento se presentan recomendaciones detalladas.

7. De conformidad con el párrafo 1 k) de la Resolución Conf. 12.8 (Rev. CoP18), la Secretaría consultó al Comité de Flora en la reunión PC27 y entre periodos de sesiones sobre si se habían aplicado las recomendaciones. Los resultados de estas consultas han sido examinados e incluidos en la evaluación de los ocho casos de flora que figuran en la presente sección.

8. De conformidad con el párrafo 1 m) de la Resolución Conf. 12.8 (Rev. CoP18) y basándose en el presente informe, se invita al Comité Permanente a decidir sobre las medidas necesarias y a formular recomendaciones a los Estados del área de distribución correspondientes o a todas las Partes respecto de cada uno de los ocho casos.

9. Congo/*Pericopsis elata* (seleccionada después de la CoP17)

   Antecedentes del caso

   a) La Secretaría informó por última vez sobre este caso al Comité Permanente en su 77ª reunión (SC77; Ginebra, noviembre de 2023) en el documento SC77 Doc. 35.3 y al Comité de Flora en la reunión PC27 en el documento PC27 Doc. 15.2.

   Recomendaciones de la reunión PC27

   b) En la reunión PC27, el Comité de Flora acordó apoyar a la Secretaría en el seguimiento y la facilitación de la aplicación de las recomendaciones formuladas en el marco del ECS para este caso, en preparación de las consultas entre períodos de sesiones previas a la presente reunión del Comité Permanente.

   c) La Secretaría comunicó las conclusiones de la reunión PC27 al Congo y proporcionará información actualizada sobre este caso en la presente reunión.

   Conclusión sobre la aplicación

   d) Las recomendaciones a) a e) siguen pendientes, sujeto a la presentación oral de cualquier información actualizada por parte de la Secretaría en la presente reunión.

10. Guinea Ecuatorial/*Guibourtia tessmannii* (seleccionada después de la CoP19)

    Antecedentes del caso

    a) La Secretaría informó por última vez sobre este caso al Comité Permanente en la reunión SC77 en el documento SC77 Doc. 35.1 (Rev. 1) y al Comité de Flora en la reunión PC27 en el documento PC27 Doc. 15.4.

    b) El 14 de agosto de 2024, la Secretaría escribió a Guinea Ecuatorial en relación con las conclusiones de la reunión PC27 sobre *Guibourtia tessmannii*, invitando a este país a proporcionar información actualizada sobre la aplicación de las recomendaciones formuladas en el marco del ECS antes del 15 de noviembre de 2024.

    Respuesta del Estado del área de distribución

    c) El 25 de agosto de 2024, Guinea Ecuatorial confirmó el establecimiento de un cupo de exportación nulo para *Guibourtia tessmannii* de conformidad con la recomendación a corto plazo.

Conclusión sobre la aplicación

d) La recomendación a) del Comité de Flora ha sido aplicada; y las recomendaciones b) a d) del Comité de Flora están en curso.

11. Indonesia/*Aquilaria malaccensis* (seleccionada después de la CoP19)

Antecedentes del caso

a) La Secretaría informó por última vez sobre este caso al Comité Permanente en la reunión SC77 en el documento SC77 Doc. 35.1 (Rev. 1) y al Comité de Flora en la reunión PC27 en el documento PC27 Doc. 15.4.

b) El 12 de agosto de 2024, la Secretaría escribió a Indonesia en relación con las conclusiones de la reunión PC27 sobre *Aquilaria malaccensis*, invitando a este país a proporcionar información actualizada sobre la aplicación de las recomendaciones formuladas en el marco del ECS antes del 15 de noviembre de 2024.

Respuesta del Estado del área de distribución

c) El 14 de agosto de 2024, Indonesia presentó un dictamen de extracción no perjudicial (DENP) relativo a *Aquilaria malaccensis* para el año 2024, incluyendo un cupo de exportación conservador para especímenes de origen silvestre e información justificativa adicional para el cupo propuesto (véase el anexo 2). De conformidad con la recomendación a) del Comité de Flora, la Secretaría consultó a la Presidencia del Comité de Flora en relación con el cupo propuesto. Los resultados de estas consultas se resumen en la columna B del anexo 1.

Conclusión sobre la aplicación

d) Las recomendaciones a) y b) del Comité de Flora han sido aplicadas; y la recomendación c) sigue en curso.

12. Malasia/*Aquilaria malaccensis* (seleccionada después de la CoP19)

Antecedentes del caso

a) La Secretaría informó por última vez sobre este caso al Comité Permanente en la reunión SC77 en el documento SC77 Doc. 35.1 (Rev. 1) y al Comité de Flora en la reunión PC27 en el documento PC27 Doc. 15.4.

b) El 14 de agosto de 2024, la Secretaría escribió a Malasia en relación con las conclusiones de la reunión PC27 sobre *Aquilaria malaccensis*, invitando a este país a proporcionar información actualizada sobre la aplicación de las recomendaciones formuladas en el marco del ECS antes del 15 de noviembre de 2024.

Respuesta del Estado del área de distribución

c) El 13 de noviembre, en respuesta a la recomendación a) del Comité de Flora (véase el anexo 3), Malasia sometió a la consideración de la Secretaría y de la Presidencia del Comité de Flora una propuesta de cupo anual para especímenes silvestres de *A. malaccensis* durante un número determinado de años. El resumen de la solicitud y el estado de las consultas se incluyen en la columna B del anexo 1 del presente documento.

Conclusión sobre la aplicación

d) Las recomendaciones a) a c) siguen en curso, sujeto a cualquier información actualizada sobre las consultas con el Comité de Flora.

13. Mozambique/*Dalbergia melanoxylon* (seleccionada después de la CoP19)

Antecedentes del caso

a) La Secretaría informó por última vez sobre este caso al Comité Permanente en la reunión SC77 en el documento SC77 Doc. 35.1 (Rev. 1) y al Comité de Flora en la reunión PC27 en el documento PC27 Doc. 15.4.

b) El 14 de agosto de 2024, la Secretaría escribió a Mozambique en relación con las conclusiones de la reunión PC27 sobre *Dalbergia melanoxylon*, invitando a este país a proporcionar información actualizada sobre la aplicación de las recomendaciones formuladas en el marco del ECS antes del 15 de noviembre de 2024.

Respuesta del Estado del área de distribución

c) El 14 de noviembre de 2024, en respuesta a la recomendación a) del Comité de Flora (véase el anexo 4), Mozambique sometió a la consideración de la Secretaría y de la Presidencia del Comité de Flora una propuesta de cupo anual para *D. melanoxylon*. El resumen de la solicitud y la información presentada por Mozambique se incluyen en la columna B del anexo 1 del presente documento.

Conclusión sobre la aplicación

d) Las recomendaciones a) a g) siguen en curso, sujeto a cualquier información actualizada sobre las consultas con el Comité de Flora.

14. Nicaragua/*Dalbergia retusa* (seleccionada después de la CoP17)

Antecedentes del caso

a) La Secretaría informó por última vez sobre este caso al Comité Permanente en la reunión SC77 en el documento SC77 Doc. 35.3 y al Comité de Flora en la reunión PC27 en el documento PC27 Doc. 15.2.

Recomendaciones de la PC27

b) En la reunión PC27, el Comité de Flora acordó apoyar a la Secretaría en el seguimiento y la facilitación de la aplicación de las recomendaciones formuladas en el marco del ECS para este caso, en preparación de las consultas entre períodos de sesiones previas a la presente reunión del Comité Permanente. Se informa sobre los progresos realizados al respecto en la columna B del anexo 1 del presente documento.

c) La Secretaría comunicó las conclusiones de la reunión PC27 a Nicaragua y proporcionará oralmente información actualizada sobre este caso en la presente reunión.

Conclusión sobre la aplicación

d) Las recomendaciones a) y b) del Comité de Flora han sido aplicadas; y las recomendaciones c) a d) siguen pendientes, sujeto a la presentación oral de cualquier información actualizada por parte de la Secretaría en la presente reunión.

15. República Unida de Tanzanía/*Dalbergia melanoxylon* (seleccionada después de la CoP19)

Antecedentes del caso

a) La Secretaría informó por última vez sobre este caso al Comité Permanente en la reunión SC77 en el documento SC77 Doc. 35.1 (Rev. 1) y al Comité de Flora en la reunión PC27 en el documento PC27 Doc. 15.4.

b) El 14 de agosto de 2024, la Secretaría escribió a la República Unida de Tanzanía en relación con las conclusiones de la reunión PC27 sobre *Dalbergia melanoxylon*, invitando a este país a proporcionar información actualizada sobre la aplicación de las recomendaciones formuladas en el marco del ECS antes del 15 de noviembre de 2024.

Respuesta del Estado del área de distribución

c) El 17 de noviembre de 2024, la República Unida de Tanzanía presentó un informe sobre los progresos realizados en la aplicación de las recomendaciones formuladas en el marco del ECS (véase el anexo

5). El resumen de la solicitud y el estado de las consultas se incluyen en la columna B del anexo 1 del presente documento.

Conclusión sobre la aplicación

d) Las recomendaciones a) a d) siguen en curso, sujeto a cualquier información actualizada sobre las consultas con el Comité de Flora.

16. República Unida de Tanzanía/*Osyris lanceolata* (seleccionada después de la CoP19)

Antecedentes del caso

a) La Secretaría informó por última vez sobre este caso al Comité Permanente en la reunión SC77 en el documento SC77 Doc. 35.1 (Rev. 1) y al Comité de Flora en la reunión PC27 en el documento PC27 Doc. 15.4.

b) El 14 de agosto de 2024, la Secretaría escribió a la República Unida de Tanzanía en relación con las conclusiones de la reunión sobre *Osyris lanceolata*, invitando a este país a proporcionar información actualizada sobre la aplicación de las recomendaciones formuladas en el marco del ECS antes del 15 de noviembre de 2024.

Respuesta del Estado del área de distribución

c) El 17 de noviembre de 2024, Tanzanía presentó un informe sobre los progresos realizados en la aplicación de las recomendaciones formuladas en el marco del ECS (véase el anexo 5), incluida la confirmación del establecimiento de un cupo de exportación nulo de conformidad con la recomendación a) del Comité de Flora. El resumen de la solicitud y el estado de las consultas se incluyen en la columna B del anexo 1 del presente documento.

Conclusión sobre la aplicación

d) La recomendación a) del Comité de Flora ha sido aplicada y, por consiguiente, la combinación especie/país *Osyris lanceolata*/República Unida de Tanzania puede ser retirada del proceso de ECS.

Sección 2. Cuestiones específicas no relacionadas con la aplicación del Artículo IV [párrafo 2 de la Resolución Conf. 12.8 (Rev. CoP18)] identificadas por el Comité de Flora en su 26ª reunión

17. En la reunión PC27, a través del proceso de ECS, se identificaron las siguientes cuestiones específicas. El Comité de Flora pidió a la Secretaría que consultara con las Partes pertinentes e informara sobre cualquier cuestión al Comité Permanente. Las cuestiones identificadas pueden ser agrupadas en las cinco categorías siguientes:

a) Se confirmó la **falta de informes anuales** para los casos de *Dalbergia melanoxylon*/República Unida de Tanzanía, *Guibourtia tessmannii*/Camerún, *Osyris lanceolata*/Burundi, *Osyris lanceolata*/Etiopía, *Osyris lanceolata*/República Unida de Tanzanía, *Aquilaria malaccensis*/Malasia y *Gyrinops* spp./Papua Nueva Guinea. En el documento SC78 Doc. 32.1 sobre *Presentación de informes anuales* la Secretaría facilita información actualizada sobre estas cuestiones.

b) Fue necesario obtener **aclaraciones de los informes anuales existentes y del uso de términos y códigos de origen** en los siguientes casos, pero la Secretaría señala que estos ya se han resuelto en gran medida:

i) *Dalbergia melanoxylon*/Mozambique: En la reunión PC27, el Comité de Flora invitó a la Secretaría a trabajar con Mozambique para obtener aclaraciones en relación con el informe anual de 2022. La Secretaría, en colaboración con el Centro Mundial de Vigilancia de la Conservación - Programa de las Naciones Unidas para el Medio Ambiente (WCMC-PNUMA), concluyó el proceso de aclaración con Mozambique y actualizó la base de datos sobre comercio, en los casos en que procedía.

ii) *Guibourtia tessmanii*/Guinea Ecuatorial: En la reunión PC27, el Comité de Flora invitó a Guinea Ecuatorial a aclarar el alcance del uso de los términos de código(s) pertinentes en los cupos publicados. En el momento de redactar el presente documento, la Secretaría está finalizando estas

aclaraciones en colaboración con el WCMC-PNUMA y presentará cualquier información actualizada al respecto en la reunión SC78.

iii) *Aquilaria malaccensis*/Indonesia: En la reunión PC27, el Comité de Flora invitó a la Secretaría a señalar a la atención del Comité Permanente la cuestión de la utilización de códigos de origen separados para los especímenes silvestres y otros sistemas de producción (código de origen A), y todos los cupos, y destacar la necesidad de que Indonesia especifique los términos para la exportación, así como el alcance de los cupos actuales, y en el futuro, considere establecer términos y cupos específicos para los sistemas de producción. El Comité de Flora toma nota de las aclaraciones proporcionadas por Indonesia, que indicó que no utiliza el código de origen Y.

c) En algunos casos se consideró que era necesario **publicar cupos de exportación nulos**. Para *Aquilaria crassna*/Viet Nam. En la reunión PC27, el Comité de Flora invitó a Viet Nam a pedir la publicación de una Notificación sobre sus medidas internas más estrictas para *Aquilaria crassna*, y a considerar la publicación de un cupo de exportación nulo para especímenes silvestres en consonancia con su legislación nacional. El Comité de Flora también invitó a la Secretaría a informar al Comité Permanente sobre las dos recomendaciones anteriores. En el momento de redactar el presente documento, la Secretaría no dispone de información actualizada sobre este asunto, pero seguirá colaborando con Viet Nam y facilitará oralmente información actualizada al respecto en la presente reunión.

d) Se identificaron **cuestiones de observancia** en relación con *Dalbergia melanoxylon*/Mozambique. En la reunión PC27, el Comité de Flora acordó recomendar al Comité Permanente que pida a Mozambique que establezca medidas de control y procedimientos de inspección adecuados para detectar e interceptar los envíos ilegales de especímenes de *Dalbergia melanoxylon*. El plazo propuesto para la aplicación de esta recomendación es de 90 días antes de la 79ª reunión del Comité Permanente.

d) Se identificaron cuestiones de **nomenclatura** en relación con *Dalbergia tucurensis*/Nicaragua. En la reunión PC27, el Comité de Flora invitó a la Secretaría a examinar, en consulta con el especialista en nomenclatura, la taxonomía de *Dalbergia tucurensis* para despejar las incertidumbres taxonómicas en relación con el concepto de especie, ya que no está claro si la especie evaluada en el marco de la Evaluación Mundial es la misma especie reconocida bajo la referencia de nomenclatura normalizada de la CITES o por Nicaragua. La Secretaría proporcionará información actualizada sobre este asunto a la Conferencia de las Partes en la CoP20.

Recomendaciones

18. Se invita al Comité Permanente a examinar las recomendaciones indicadas en los siguientes párrafos 19 y 20.

Con respecto a la Sección 1 del presente documento

19. De conformidad con el párrafo 1 m) de la Resolución Conf. 12. (Rev. CoP18) y basándose en el presente informe y sus anexos, se invita al Comité Permanente a hacer lo siguiente:

a) Congo/*Pericopsis elata*: tomar nota de que las recomendaciones a) a e) siguen pendientes y reconsiderar su decisión en relación con la aplicación basándose en cualquier información actualizada presentada por la Secretaría en la presente reunión;

b) Guinea Ecuatorial/*Guibourtia tessmannii*: tomar nota de que la recomendación a) ha sido aplicada, y de que las recomendaciones b) a d) siguen en curso;

c) Indonesia/*Aquilaria malaccensis*: tomar nota de que las recomendaciones a) y b) han sido aplicadas, y de que la recomendación c) sigue en curso;

d) Malasia/*Aquilaria malaccensis*: considerar cualquier información actualizada presentada por la Secretaría en la presente reunión en relación con la determinación de si la recomendación a) ha sido aplicada; y tomar nota de que las recomendaciones b) y c) siguen en curso;

d) Mozambique/*Dalbergia melanoxylon*: considerar cualquier información actualizada presentada por la Secretaría en la presente reunión en relación con la determinación de si las recomendaciones a) y b) han sido aplicadas; y tomar nota de que las recomendaciones c) a g) siguen en curso;

f) Nicaragua/*Dalbergia retusa*: tomar nota de que las recomendaciones a) y b) han sido aplicadas, y de que las recomendaciones c) y d) sigue en curso;

g) República Unida de Tanzanía/*Dalbergia melanoxylon*: considerar cualquier información actualizada presentada por la Secretaría en la presente reunión en relación con la determinación de si las recomendaciones a) a d) han sido aplicadas; y

h) República Unida de Tanzanía/*Osyris lanceolata*: tomar nota de que la recomendación a) ha sido aplicada y acordar que esta combinación especie/país puede ser retirada del proceso de ECS.

En lo que respecta a la sección 2 del presente documento

20. Se invita al Comité Permanente a tomar nota del informe de la Secretaría que figura en el párrafo 17 d) del presente documento, y a solicitar a Mozambique que establezca medidas de control y procedimientos de inspección adecuados para detectar e interceptar los envíos ilegales de especímenes de *Dalbergia melanoxylon* y que informe sobre esta cuestión a la 79ª reunión del Comité Permanente.

RECOMENDACIONES DEL COMITÉ DE FLORA EN RELACIÓN CON LAS ESPECIES SELECCIONADAS PARA EL EXAMEN DEL COMERCIO SIGNIFICATIVO DESPUÉS DE LA COP17 Y LA COP19; RESPUESTAS DE LOS ESTADOS DEL ÁREA DE DISTRIBUCIÓN CORRESPONDIENTES Y EVALUACIÓN DE LA APLICACIÓN POR PARTE DE LA SECRETARÍA

A. Combinación especie/país	**B. Recomendaciones del Comité de Flora, y decisiones anteriores del Comité Permanente si las hubiere**	**C. Información actualizada sobre la aplicación de las recomendaciones (incluidas las respuestas de los estados del área de distribución)**
Congo/*Pericopsis elata*	**Recomendaciones de la reunión PC24** Medidas a corto plazo (antes del 13 de diciembre de 2018) a) Establecer un cupo de exportación conservador en consulta con la Secretaría de la CITES y la Presidencia del Comité de Flora e informar a la Secretaría de la CITES de este cupo para que pueda ser incluido en el cupo de exportación nacional en el sitio web de la CITES. b) Antes de realizar un aumento de este cupo, el Estado del área de distribución deberá comunicar a la Secretaría y a la Presidencia del Comité de Flora para su aprobación los cambios previstos con una justificación de cómo el cambio es conservador, basándose en estimaciones de extracciones sostenibles que hagan uso de la mejor información científica disponible. Medidas a largo plazo (antes del 13 de diciembre de 2020) c) Desarrollar y aplicar planes coordinados de gestión nacionales y/o locales (que incluyan consideraciones sobre la gestión de las extracciones) con claros requisitos de supervisión; la gestión deberá ser adaptable (examen periódico de los registros de las extracciones y de sus efectos, así como ajuste de las instrucciones con relación a las mismas, en caso de ser necesario); las restricciones de las extracciones se basarán en los resultados de la supervisión. d) De manera general, el examen tendrá como objetivo garantizar la existencia de un proceso eficaz de formulación de los DENP con medidas de manejo de las extracciones claramente definidas (por ejemplo, períodos mínimos de rotación, niveles mínimos de DAP, buenas técnicas para las extracciones, impacto de las mismas) con un sistema de supervisión a nivel local apropiado y efectivo.	Evaluación de la Secretaría sobre la aplicación de las recomendaciones Las recomendaciones a) a e) siguen pendientes. Medidas recomendadas por la Secretaría Se invita al Comité Permanente a tomar nota de que las recomendaciones a) a e) siguen pendientes y a reconsiderar su decisión en relación con la aplicación basándose en cualquier información actualizada presentada por la Secretaría en la presente reunión.

A. Combinación especie/país	B. Recomendaciones del Comité de Flora, y decisiones anteriores del Comité Permanente si las hubiere	C. Información actualizada sobre la aplicación de las recomendaciones (incluidas las respuestas de los estados del área de distribución)
	e) Llevar a cabo una supervisión de los efectos de las extracciones y aplicar restricciones a las mismas, así como a las exportaciones, basándose en los resultados de dicha supervisión. **Recomendaciones de la reunión SC77** f) El Comité Permanente instó al Congo a seguir avanzando en la aplicación de las recomendaciones pendientes, en colaboración estrecha con la Secretaría, y pedir al Congo que aportara información actualizada con la antelación suficiente para que pudiera ser examinada en la 78ª reunión del Comité Permanente. **Recomendaciones de la reunión PC27** En la reunión PC27, el Comité de Flora acordó apoyar a la Secretaría en el seguimiento y la facilitación de la aplicación de las recomendaciones formuladas en el marco del ECS para este caso, en preparación de las consultas entre períodos de sesiones previas a la presente reunión del Comité Permanente. **Informaciones actualizadas tras la reunión PC27** En el momento de redactar el presente documento, la Secretaría no dispone de nuevas informaciones que comunicar sobre este caso, pero sigue colaborando con el Congo en la aplicación de las recomendaciones de la reunión PC27 y presentará información actualizada al respecto en la reunión SC78.	
Guinea Ecuatorial/*Guibourtia tessmannii*	**Recomendaciones de la reunión PC27** Medidas a corto plazo (antes del 15 de noviembre de 2024) a) Establecer, en consulta con la Secretaría y la Presidenta del Comité de Flora, un cupo de exportación nulo/un cupo de exportación conservador provisional dentro de los 90 días para *Guibourtia tessmannii* y comunicar el cupo a la Secretaría. No deberían tener lugar exportaciones hasta que se publique el cupo en el sitio web de la Secretaría. El cupo de exportación debería justificarse como conservador basándose en las estimaciones de la extracción sostenible que hace uso de la información científica disponible. Antes de proceder a un aumento de este cupo provisional, los cambios previstos deberían ser comunicados por el Estado del área de distribución a la Secretaría y a la Presidenta del Comité de Flora junto con una justificación de cómo el cambio es conservador, basándose en las estimaciones de la extracción sostenible que hace uso de la información científica disponible, para su acuerdo.	Evaluación de la Secretaría sobre la aplicación de las recomendaciones La recomendación a) del Comité de Flora se ha aplicado. Las recomendaciones b) a d) del Comité de Flora están en curso. Medidas recomendadas por la Secretaría Se invita al Comité Permanente a tomar nota de que la recomendación a) ha sido aplicada, y de que las recomendaciones b) a d) siguen en curso.

A. Combinación especie/país	B. Recomendaciones del Comité de Flora, y decisiones anteriores del Comité Permanente si las hubiere	C. Información actualizada sobre la aplicación de las recomendaciones (incluidas las respuestas de los estados del área de distribución)
	Medidas a largo plazo (antes del 14 de agosto de 2026) b) Analizar y, cuando sea apropiado, modificar los sistemas de manejo establecidos, incluyendo los métodos utilizados para calcular los niveles de población y para evaluar la sostenibilidad de las extracciones, teniendo en cuenta los niveles y la frecuencia de las extracciones, las tasas de crecimiento anual de la especie y la ubicación de las extracciones. Examinar de manera crítica las medidas de supervisión, la presentación de informes sobre las mismas y su evaluación, considerar su eficacia y modificarlas según proceda. De manera general, el examen tendrá como objetivo garantizar la existencia de un proceso eficaz de formulación de los DENP con medidas de manejo de las extracciones claramente definidas (por ejemplo, períodos mínimos de rotación, niveles mínimos de DAP, buenas técnicas para las extracciones, impacto de las mismas) con un sistema de supervisión a nivel local apropiado y efectivo. Medidas a largo plazo (antes del 14 de agosto de 2027) c) Llevar a cabo una supervisión de los efectos de las extracciones y aplicar restricciones a las mismas, así como a las exportaciones, basándose en los resultados de dicha supervisión. d) Tras la implementación de otras recomendaciones, comunicar la base científica en la que se fundó para establecer que las exportaciones no son perjudiciales para la supervivencia de la especie y cumplen con lo previsto en los párrafos 2 a), 3 y 6 a) del Artículo IV de la Convención. Debería prestarse particular atención a cómo las medidas que ha tomado o tomará el Estado del área de distribución responden a las preocupaciones/los problemas identificados en el proceso de Examen del Comercio Significativo. **Informaciones actualizadas tras la reunión PC27** El 25 de agosto de 2024, Guinea Ecuatorial confirmó que había establecido un cupo de exportación nulo para *Guibourtia tessmannii* de conformidad con la recomendación a corto plazo.	
Indonesia/*Aquilaria malaccensis*:	**Recomendaciones de la reunión PC27** Medidas a corto plazo (antes del 12 de noviembre de 2024) a) Establecer, en consulta con la Secretaría y la Presidenta del Comité de Flora, un cupo de exportación conservador provisional al nivel de las especies para código de	Evaluación de la Secretaría sobre la aplicación de las recomendaciones

A. Combinación especie/país	B. Recomendaciones del Comité de Flora, y decisiones anteriores del Comité Permanente si las hubiere	C. Información actualizada sobre la aplicación de las recomendaciones (incluidas las respuestas de los estados del área de distribución)
	origen W dentro de los 90 días para *Aquilaria malaccensis* y comunicar el cupo a la Secretaría. No deberían tener lugar exportaciones hasta que se publique el cupo en el sitio web de la Secretaría. El cupo de exportación debería justificarse como conservador basándose en las estimaciones de la extracción sostenible que hace uso de la información científica disponible. Antes de proceder a un aumento de este cupo provisional, los cambios previstos deberían ser comunicados por el Estado del área de distribución a la Secretaría y a la Presidenta del Comité de Flora junto con una justificación de cómo el cambio es conservador, basándose en las estimaciones de la extracción sostenible que hace uso de la información científica disponible, para su acuerdo. b) Comunicar los mecanismos en vigor para garantizar que las especies recolectadas en el medio silvestre se identifican correctamente y se distinguen de los especímenes reproducidos artificialmente. <u>Medidas a largo plazo (antes del 12 de agosto de 2027)</u> c) Tras la implementación de otras recomendaciones, comunicar la base científica en la que se fundó para establecer que las exportaciones no son perjudiciales para la supervivencia de la especie y cumplen con lo previsto en los párrafos 2 a), 3 y 6 a) del Artículo IV de la Convención. Debería prestarse particular atención a cómo las medidas que ha tomado o tomará el Estado del área de distribución responden a las preocupaciones/los problemas identificados en el proceso de Examen del Comercio Significativo. <u>Informaciones actualizadas tras la reunión PC27</u> El 14 de agosto de 2024, Indonesia presentó un dictamen de extracción no perjudicial relativo a *Aquilaria malaccensis* para el año 2024 (disponible a través de este enlace a la base de datos de la CITES sobre los DENP), así como información adicional justificativa a fin de establecer un cupo de exportación conservador para especímenes de origen silvestre para el año 2024. De conformidad con la recomendación a) del Comité de Flora, la Secretaría consultó con la Presidencia del Comité de Flora en relación con este cupo. Tras examinar el DENP y la información justificativa proporcionada por Indonesia, la Secretaría y la Presidencia del Comité de Flora acordaron la publicación del cupo de 24 110 kg de *Aquilaria malaccensis* de origen silvestre (W) procedente	Las recomendaciones a) y b) del Comité de Flora se han aplicado. La recomendación c) del Comité de Flora sigue en curso. <u>Medidas recomendadas por la Secretaría</u> Se invita al Comité Permanente a tomar nota de que las recomendaciones a) y b) han sido aplicadas, y de que la recomendación c) sigue en curso.

A. Combinación especie/país	B. Recomendaciones del Comité de Flora, y decisiones anteriores del Comité Permanente si las hubiere	C. Información actualizada sobre la aplicación de las recomendaciones (incluidas las respuestas de los estados del área de distribución)
	de Indonesia para 2024, como cupo provisional conservador en consonancia con la recomendación a) del Comité de Flora. Esta decisión se basó en una evaluación del DENP y de la información justificativa proporcionada, y en el hecho de que el cupo propuesto para 2024 representaba una disminución significativa en relación con los cupos establecidos anteriormente para especímenes silvestres de *A. malaccensis*. La Secretaría y la Presidencia del Comité de Flora recomendaron, no obstante, que para cualquier aumento futuro de este cupo se actualizara el DENP. Como parte de la información justificativa, Indonesia también presentó un informe (anexo 2) sobre los criterios que siguen para distinguir los especímenes de origen silvestre (código de origen W), de los de producción asistida (código de origen Y) y los de plantaciones (código de origen A). En el informe se describen varios mecanismos existentes para identificar y distinguir los especímenes de *Aquilaria malaccensis* recolectados en el medio natural de los reproducidos artificialmente. El conjunto de mecanismos establecidos incluye procedimientos relativos a: marco reglamentario y permisos, documentación y trazabilidad, identificación morfológica, e inspección y control sobre el terreno y de la documentación en las fases de transporte y transformación. En el informe se reconocen, sin embargo, algunos problemas de identificación o diferenciación entre especímenes de origen silvestre y reproducidos artificialmente cuando se trata de productos procesados o acabados, como astillas y polvo. Los mecanismos descritos por Indonesia permiten considerar que estos se ajustan ampliamente a la recomendación b) del Comité de Flora, ya que existen y se aplican sistemas de verificación y distinción entre los especímenes de origen silvestre y los reproducidos artificialmente.	
Malasia/*Aquilaria malaccensis*	**<u>Recomendaciones de la reunión PC27</u>** <u>Medidas a corto plazo (antes del 15 de noviembre de 2024)</u> a) Establecer, en consulta con la Secretaría y la Presidenta del Comité de Flora, un cupo de exportación provisional dentro de los 90 días para *Aquilaria malaccensis* y comunicar el cupo a la Secretaría. No deberían tener lugar exportaciones hasta que se publique el cupo en el sitio web de la Secretaría.	<u>Evaluación de la Secretaría sobre la aplicación de las recomendaciones</u> Las recomendaciones a) a c) siguen en curso. <u>Medidas recomendadas por la Secretaría</u> Se invita al Comité Permanente a:

A. Combinación especie/país	B. Recomendaciones del Comité de Flora, y decisiones anteriores del Comité Permanente si las hubiere	C. Información actualizada sobre la aplicación de las recomendaciones (incluidas las respuestas de los estados del área de distribución)
	El cupo de exportación debería justificarse como conservador basándose en las estimaciones de la extracción sostenible que hace uso de la información científica disponible. Antes de proceder a un aumento de este cupo provisional, los cambios previstos deberían ser comunicados por el Estado del área de distribución a la Secretaría y a la Presidenta del Comité de Flora junto con una justificación de cómo el cambio es conservador, basándose en las estimaciones de la extracción sostenible que hace uso de la información científica disponible, para su acuerdo. b) Comunicar los mecanismos en vigor para garantizar que las especies recolectadas en el medio silvestre se identifican correctamente y se distinguen de los especímenes reproducidos artificialmente. <u>Medidas a largo plazo (antes del 14 de agosto de 2027)</u> c) Tras la implementación de otras recomendaciones, comunicar la base científica en la que se fundó para establecer que las exportaciones no son perjudiciales para la supervivencia de la especie y cumplen con lo previsto en los párrafos 2 a), 3 y 6 a) del Artículo IV de la Convención. Debería prestarse particular atención a cómo las medidas que ha tomado o tomará el Estado del área de distribución responden a las preocupaciones/los problemas identificados en el proceso de Examen del Comercio Significativo. **<u>Informaciones actualizadas tras la reunión PC27</u>** Mediante una carta con fecha de 13 de noviembre, Malasia sometió a la consideración de la Secretaría y de la Presidencia del Comité de Flora el establecimiento de un cupo anual de 5 000 kg de especímenes silvestres de *A. malaccensis* para los años 2025 a 2027, en respuesta a la recomendación a) del Comité de Flora. La información justificativa está disponible en el anexo 3 del presente documento. Habida cuenta de que la respuesta fue enviada cerca de la fecha límite de presentación de la documentación para la reunión SC78, en el momento de redactar el presente documento la Secretaría está consultando con la Presidencia del Comité de Flora en relación con el cupo propuesto, y está realizando nuevas consultas con el Comité de Flora en relación con los progresos realizados en la aplicación de la recomendación a).	- considerar cualquier información actualizada presentada por la Secretaría en la presente reunión en relación con la determinación de si la recomendación a) ha sido aplicada; y, - tomar nota de que las recomendaciones b) y c) siguen en curso.

A. Combinación especie/país	B. Recomendaciones del Comité de Flora, y decisiones anteriores del Comité Permanente si las hubiere	C. Información actualizada sobre la aplicación de las recomendaciones (incluidas las respuestas de los estados del área de distribución)
Mozambique/*Dalbergia melanoxylon*:	**Recomendaciones de la reunión PC27** Medidas a corto plazo (antes del 15 de noviembre de 2024) a) Establecer, en consulta con la Secretaría y la Presidenta del Comité de Flora, un cupo de exportación nulo/un cupo de exportación conservador provisional dentro de los 90 días para *Dalbergia melanoxylon* y comunicar el cupo a la Secretaría. No deberían tener lugar exportaciones hasta que se publique el cupo en el sitio web de la Secretaría. b) El cupo de exportación debería justificarse como conservador basándose en las estimaciones de la extracción sostenible que hace uso de la información científica disponible. c) Antes de proceder a un aumento de este cupo provisional, los cambios previstos deberían ser comunicados por el Estado del área de distribución a la Secretaría y a la Presidenta del Comité de Flora junto con una justificación de cómo el cambio es conservador, basándose en las estimaciones de la extracción sostenible que hace uso de la información científica disponible, para su acuerdo. Medidas a largo plazo (antes del 14 de agosto de 2026) d) Examinar y, según proceda, revisar los sistemas de gestión en vigor, inclusive cómo se calculan los niveles de población y se evalúa la extracción sostenible, teniendo en cuenta los niveles y la frecuencia de la extracción, las tasas de crecimiento anual para la especie, la ubicación de la explotación, el índice de reclutamiento y la regeneración. Examinar de manera crítica las medidas de supervisión, la presentación de informes sobre las mismas y su evaluación, considerar su eficacia y modificarlas según proceda. De manera general, el examen tendrá como objetivo garantizar la existencia de un proceso eficaz de formulación de los DENP con medidas de manejo de las extracciones claramente definidas (por ejemplo, períodos mínimos de rotación, niveles mínimos de DAP, buenas técnicas para las extracciones, impacto de las mismas) con un sistema de supervisión a nivel local apropiado y efectivo. e) Llevar a cabo una supervisión de los efectos de las extracciones y aplicar restricciones a las mismas, así como a las exportaciones, basándose en los resultados de dicha supervisión.	Evaluación de la Secretaría sobre la aplicación de las recomendaciones Las recomendaciones a) a g) siguen en curso. Medidas recomendadas por la Secretaría Se invita al Comité Permanente a: - considerar cualquier información actualizada presentada por la Secretaría en la presente reunión en relación con la determinación de si las recomendaciones a) y b) han sido aplicadas; y - tomar nota de que las recomendaciones c) a g) siguen en curso.

A. Combinación especie/país	B. Recomendaciones del Comité de Flora, y decisiones anteriores del Comité Permanente si las hubiere	C. Información actualizada sobre la aplicación de las recomendaciones (incluidas las respuestas de los estados del área de distribución)
	f) Tras la implementación de otras recomendaciones, comunicar la base científica en la que se fundó para establecer que las exportaciones no son perjudiciales para la supervivencia de la especie y cumplen con lo previsto en los párrafos 2 a), 3 y 6 a) del Artículo IV de la Convención. Debería prestarse particular atención a cómo las medidas que ha tomado o tomará el Estado del área de distribución responden a las preocupaciones/los problemas identificados en el proceso de Examen del Comercio Significativo. g) Desarrollar cupos de exportación basados en la ciencia utilizando términos y unidades normalizadas utilizadas en la declaración de los cupos de exportación del comercio que se encuentran en la versión más reciente de las Directrices para la preparación de informes anuales CITES. **Informaciones actualizadas tras la reunión PC27** Mediante una comunicación por correo electrónico con fecha de 14 de noviembre de 2024, Mozambique sometió a la consideración de la Secretaría y de la Presidencia del Comité de Flora el establecimiento de un cupo anual de 8 762,5 m^3 de *D. melanoxylon* (véase el anexo 4). En la solicitud presentada por Mozambique se hace referencia al Inventario Forestal Nacional y a los datos de los inventarios forestales provinciales que se utilizan para calcular el volumen anual admisible de tala. Habida cuenta de que esta respuesta fue enviada cerca de la fecha límite de presentación de la documentación para la reunión SC78, en el momento de redactar el presente documento la Secretaría está consultando con la Presidencia del Comité de Flora en relación con el cupo propuesto, y está realizando nuevas consultas con el Comité de Flora en relación con los progresos realizados en la aplicación de las recomendaciones a) y b).	
Nicaragua/*Dalbergia retusa*	**Recomendaciones de la reunión PC24** Medidas a corto plazo (antes del 20 de diciembre de 2018) a) Proporcionar información sobre la ubicación y extensión de las áreas de exportación con planes de manejo de las extracciones. b) Presentar planes de manejo que incluyan cualquier información disponible sobre los inventarios y los sistemas de supervisión actualmente en vigor Medidas a largo plazo (antes del 20 de noviembre de 2020)	Evaluación de la Secretaría sobre la aplicación de las recomendaciones Las recomendaciones a) y b) han sido aplicadas (como se reconoció en la reunión SC74). Las recomendaciones c) y d) siguen pendientes. Medidas recomendadas por la Secretaría Se invita al Comité Permanente a:

A. Combinación especie/país	B. Recomendaciones del Comité de Flora, y decisiones anteriores del Comité Permanente si las hubiere	C. Información actualizada sobre la aplicación de las recomendaciones (incluidas las respuestas de los estados del área de distribución)
	c) Realizar un análisis del estado de la población a escala nacional, basado en inventarios forestales nacionales existentes y en inventarios forestales en desarrollo y planes para un proceso de supervisión d) Tras la implementación de otras recomendaciones, comunicar la base científica en la que se fundó para establecer que las exportaciones no son perjudiciales para la supervivencia de la especie y cumplen con lo previsto en los párrafos 2 a), 3 y 6 a) del Artículo IV de la Convención. Debería prestarse particular atención a cómo las medidas que ha tomado o tomará el Estado del área de distribución responden a las preocupaciones/los problemas identificados en el proceso de Examen del Comercio Significativo. **<u>Recomendaciones de la reunión SC74</u>** e) Encomió a Nicaragua por su pronta aplicación de las recomendaciones a) y b) del Comité de Flora; y f) solicitó a Nicaragua que aclarara de qué manera los DENP producidos hasta ahora se traducirán en el establecimiento de cupos anuales sostenibles; y g) solicitó a Nicaragua que finalizara la aplicación de las recomendaciones c) y d) del Comité de Flora tres meses antes de la fecha límite de presentación de la documentación para la SC77. **<u>Recomendaciones de la reunión SC77</u>** h) El Comité Permanente: i. tomó nota de que la Secretaría está buscando vías para responder a la petición de Nicaragua de apoyo financiero como parte de la fase de ensayos de campo del proyecto sobre DENP (según la Decisión 19.132); ii. pidió a la Secretaría que publicara una Notificación con el fin de invitar a las Partes e interesados pertinentes a contribuir recursos financieros para apoyar la aplicación de las recomendaciones pendientes del ECS por Nicaragua; e iii. instó a Nicaragua a realizar progresos significativos en la aplicación de las recomendaciones c) y d) del Comité de Flora pendientes, a tiempo para que esta cuestión sea examinada en la 78ª reunión del Comité Permanente. **<u>Recomendaciones de la reunión PC27</u>** En la reunión PC27, el Comité de Flora acordó apoyar a la Secretaría en el seguimiento y la facilitación de la aplicación de las recomendaciones formuladas en el marco del ECS para este caso, en preparación de las consultas entre períodos de sesiones previas a la presente reunión del Comité Permanente. **<u>Informaciones actualizadas desde la reunión PC27</u>**	- tomar nota de que las recomendaciones a) y b) han sido aplicadas; y - tomar nota de que las recomendaciones c) y d) siguen pendientes.

A. Combinación especie/país	B. Recomendaciones del Comité de Flora, y decisiones anteriores del Comité Permanente si las hubiere	C. Información actualizada sobre la aplicación de las recomendaciones (incluidas las respuestas de los estados del área de distribución)
	En el momento de redactar el presente documento, la Secretaría sigue coordinando la formalización de un acuerdo para apoyar a Nicaragua en la aplicación de las recomendaciones formuladas en el marco del ECS que aún están pendientes para este caso. La Secretaría informará en la reunión SC78 sobre los progresos realizados al respecto.	
República Unida de Tanzanía/*Dalbergia melanoxylon*	**Recomendaciones de la reunión PC27** Medidas a corto plazo (antes del 15 de noviembre de 2024) a) Proporcionar aclaración sobre las discrepancias entre los volúmenes exportados comunicados por la Autoridad Administrativa CITES de Tanzanía (TZ) en respuesta a la consulta realizada en el marco del ECS y los volúmenes de exportación comunicados en la Base de datos sobre el comercio CITES. b) Proporcionar información sobre la ubicación y extensión de las áreas gestionadas para la exportación. c) Presentar planes de manejo que incluyan cualquier información disponible sobre los inventarios y los sistemas de supervisión actualmente en vigor Medidas a largo plazo (antes del 14 de agosto de 2026) d) Desarrollar DENP para todas las poblaciones de Dalbergia melanoxylon destinadas a la exportación para permitir el establecimiento de un cupo de exportación a nivel de unidad de gestión correspondiente **Informaciones actualizadas tras la reunión PC27** El 17 de noviembre de 2024, la República Unida de Tanzanía presentó un informe (anexo 5) sobre los progresos realizados en la aplicación de las recomendaciones formuladas en el marco del ECS para *D. melanoxylon*. El informe incluye información relativa a las discrepancias entre los volúmenes de exportación, en respuesta a la recomendación a), y proporciona información sobre la ubicación y extensión de las áreas gestionadas para la exportación, en respuesta a la recomendación b). El informe incluye información relativa a los inventarios y los planes de gestión, de conformidad con lo solicitado en la recomendación c). Habida cuenta de que esta respuesta fue enviada cerca de la fecha límite de presentación de la documentación para la reunión SC78, en el momento de redactar el presente	Evaluación de la Secretaría sobre la aplicación de las recomendaciones Las recomendaciones a) a d) siguen en curso. Medidas recomendadas por la Secretaría Se invita al Comité Permanente a considerar cualquier información actualizada presentada por la Secretaría en la presente reunión en relación con la determinación de si las recomendaciones a) a d) han sido aplicadas.

A. Combinación especie/país	B. Recomendaciones del Comité de Flora, y decisiones anteriores del Comité Permanente si las hubiere	C. Información actualizada sobre la aplicación de las recomendaciones (incluidas las respuestas de los estados del área de distribución)
	documento la Secretaría está consultando con el Comité de Flora en relación con el informe sobre los progresos realizados presentado por la República Unida de Tanzanía. La Secretaría señala que el informe parece indicar que la República Unida de Tanzanía tiene la intención de establecer un cupo para *D. melanoxylon*, sin embargo, la cifra exacta no está clara y la aplicación de la recomendación d) sigue pendiente. Se presentaron informes sobre planes de manejo en dos distritos; sin embargo, no está claro si estos constituyen un DENP en sí mismos.	
República Unida de Tanzanía/*Osyris lanceolata*	**Recomendaciones de la reunión PC27** Medidas a corto plazo (antes del 15 de noviembre de 2024) a) Establecer, en consulta con la Secretaría y la Presidenta del Comité de Flora, un cupo de exportación nulo/un cupo de exportación conservador provisional dentro de los 90 días para *Osyris lanceolata* y comunicar el cupo a la Secretaría. No deberían tener lugar exportaciones hasta que se publique el cupo en el sitio web de la Secretaría. El cupo de exportación debería justificarse como conservador basándose en las estimaciones de la extracción sostenible que hace uso de la información científica disponible. Antes de proceder a un aumento de este cupo provisional, los cambios previstos deberían ser comunicados por el Estado del área de distribución a la Secretaría y a la Presidenta del Comité de Flora junto con una justificación de cómo el cambio es conservador, basándose en las estimaciones de la extracción sostenible que hace uso de la información científica disponible, para su acuerdo. **Informaciones actualizadas tras la reunión PC27** Mediante una comunicación por correo electrónico con fecha de 17 de noviembre de 2024, Tanzanía presentó un informe (anexo 5) sobre los progresos realizados en la aplicación de las recomendaciones formuladas en el marco del ECS para *Osyris lanceolata*, incluida la confirmación del establecimiento de un cupo de exportación nulo para especímenes silvestres de *O. lanceolata* de conformidad con la recomendación a) del Comité de Flora. Este cupo ha sido publicado en la página web de la CITES.	Evaluación de la Secretaría sobre la aplicación de las recomendaciones La recomendación a) ha sido aplicada. Medidas recomendadas por la Secretaría Se invita al Comité Permanente a tomar nota de que la recomendación a) ha sido aplicada y a acordar que esta combinación especie/país puede ser retirada del proceso de ECS.

MINISTRY OF ENVIRONMENT AND FORESTRY REPUBLIC OF INDONESIA
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International Environment House
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CH-1219 Chatelaine Geneva
Switzerland
Email: info@cites.org

Subject: CITES PC26 Review of Significant Trade: Exports of *Aquilaria malaccensis* and *Gyrinops* spp. from Indonesia

Dear Madam,

Referring to your email dated 4th August 2023 regarding the above mention and the result of document executive summary the twenty-sixth meeting of the Plant Committee, the species of *A. malaccensis* and *Gyrinops* spp. from Indonesia is recommended for inclusion in Stage 2 of the Review of Significant Trade. For *A. malaccensis*, Indonesia is requested to provide information the source code of export and the scientific basis by which Indonesia established that exports of *A. malaccensis* are not detrimental to the survival of the species concerned and are compliant with Article IV of CITES. Thus, please kindly find the document response of the Review of Significant Trade for *A. malaccensis* and *Gyrinops* spp. as attached for your perusal.

Thank you for your kind attention and consideration.

Yours sincerely,

Indra Exploitasia, DVM
Interim Director of Biodiversity Conservation of Species and Genetic Email: subditkonvensi.kkh@gmail.com, dit.kkh@gmail.com

cc.:
1. Director General of Natural Resources and Ecosystem Conservation, MoEF;
2. Permanent Mission of The Republic of Indonesia to the UN, WTO, and Other International Organization in Geneva, MoFA;
3. Director of Secretariat of Scientific Authority for Biodiversity.

Assessment of the trade of specimen with source code "W" for the species *Aquilaria malaccencis*

I. Non-Detriment Finding Process

The Scientific Authority (SA) establishes teams for evaluating trade of plant species, consisting of personnels from different research centres in the National Research and Innovation Agency (Indonesian: Badan Riset dan Inovasi Nasional-BRIN) and some personnels from the Management Authority (MA) of the Ministry of Environment and Forestry. The team gathers information from various sources, verified their validity at its best, based on scientific principles, and categorized their degree of reliability. Verification is carried out through discussions and visits to points of production, and documentation. Information and results of studies are often obtained sequentially, in accordance with the process and dynamics of trading activities.

The Management Authority (MA) and their field officers are SA's principal teammates in compiling the data, and prepare the assessment and reports. They are maintaining historical records of trade licensing and corresponding activities. Another contributor who also plays the role in acquiring relevant data and information is the trader association. They hold documentation of their members' activities and often facilitate visit to processing sites. Other researchers from BRIN and universities are also involved in field studies on different aspects.

The SA and MA evaluate the imposed annual quota for appendix II species by conducting several meetings and data gathering, starting in the eighth and ninth months of each year. The latest quota and the number of products used were obtained from the records of permit letters that have been granted become the starting point to set the annual quota. Whenever necessary, extra field inspection would be suggested by the SA to the field officers whose results will be reported as additional data/information to be discussed in the final meeting. The evaluation result will become the bases for the quota setting for the following years.

II. Review of the population

Aquilaria malaccensis is one of the agarwood species from the genus *Aquilaria*, Thymelaeaceae. There are 13 species of agarwood belonging to two genera, i.e., *Aquilaria* and *Gyrinops* that are distributed throughout Indonesia. According to Plant of World Online (PoWO) (2023) *A. malaccensis* has homotypic synonyms as *Agallochum malaccense* (Lam.) Kuntze in Revis. Gen. Pl. 1: 283 (1891) and *Aquilaria malaccensis* (Lam.) Tiegh. in Bull. Soc. Bot. France 40: 77 (1893). The common or trade name for this species are agar, agarwood, eaglewood, Indian aloeswood, Malayan eaglewood tree, aloeswood, lign-aloes (English), *kayu karas*, *gaharu*, *garu* (Indonesia), *halim* (Lampung), *alim* (Batak), *kareh* (Minang), *mengkaras*, *calabac*, *karas*, *kekaras* (Dayak), *galoop* (Melayu) dan *seringak* (GBIF 2023; Susilo et. al. 2014).

This species is native to Assam, Bangladesh, Borneo, East Himalaya, Malaya, Myanmar, Philippines, Sumatera, Thailand, Vietnam (PoWO (2023), Harvey-Brown (2018)); Bhutan; India (Arunachal Pradesh, Assam, Manipur, Meghalaya, Mizoram, Nagaland, Sikkim, Tripura); Singapore, while its presence in Sarawak needs confirmation (J. Sang pers. comm. 2018 in Harvey-Brown, 2018). In Indonesia, the range distribution of *A. malaccensis* is in the western part of the country i.e., Sumatra and Kalimantan. However, based on the herbarium, this species has also been collected from small islands near Sumatra e.i: Bangka, Belitung, Karimun and Singkep.

Species of *Aquilaria* may grow next to each other, for example, *A. malaccensis* dan *A. microcarpa* is found in the same area in Riau and Bengkulu. Those species may thrive in a kind environment. Meanwhile, seedling and adult trees without flowers or fruit are hardly distinguished. Adult *A. microcarpa* has smaller leaf size compared to *A. malaccencis*, but in other observations in different locations, both leaf sizes are similar. This identification issue is recognized as one of the main topic to be addressed in its taxonomical research.

Generally, *A. malaccensis* can be found in forests from lowland up to submontane ecosystems at the elevation 0-1000 m. It grows in areas with 20-33 ºC temperature, 60-100% of humidity, 56-75% light intensity, 0-50% of slope, 6.4-7 of soil pH, and 10-75% of soil humidity, with rain intensity 1.200-2.000 mm/year (Sumarna, 2008; Pribadi, 2009; CITES, 2003 & Harvey-Brown, 2018). This species may grow in rocky, sandy, or calcareous soils, well-drained slopes, and ridges, or areas near swamps. This species can also occur as an emergent tree (Page and Awarau, 2012). *A. malaccensis* starts to produce flowers and seeds at > 20 cm in diameter, or between 6 - 10 years after planting. They are reported to produce thousands of seeds during one fruiting period. Based on a field survey carried out in 2009, *A. beccariana* and *A. malaccensis* produce fruits from sapling stage at < 10 cm diameter. Paoli et al. (2001) recorded that in the natural forest in Kalimantan, trees that have reached reproductive maturity start at approximately 35 cm in diameter.

In Indonesia, agarwood *A. malaccensis* may be found in the forest (state forest and community forest) or non-forest areas (Figure 1, 2, 3, 4, & 5). At the state forest area, this species grows both in the conservation area (e.i., natural reserve or national parks) and in the production forest. In the past, people hunted agarwood only in the production forest of Kalimantan and Sumatra, and spent weeks to months. The resulted gathering is known as wild agarwood. Currently, there are sporadic land-use changes. This has caused forested areas for hunting agarwood to become less. The lands are turned into palm oil or rubber plantations (Figure 2). However, agarwood trees in such plantations were left to grow naturally and maintained along with the main crop. Trees in these areas receive no special treatment, other than regular nurture and checking. Whenever the main stem of the trees is found to contain resin, the owner of the land would have them harvested.

Figure 1. Wild of *A. malaccensis* in community forest, Siak Regency, Riau Province

Agarwood has a high economic value because of their resin content. The trees would release aromatic substances, known as resin inside the wood, whenever they are infected by some particular fungi (e.i., *Fusarium*). The presence of resin is signed by some dark layers that form a distinct pattern and aroma to the wood. In plantation or "assisted production" area, the farmer makes some physical treatment to the stem i.e., injection, peeling the bark, nailing, etc., and applies chemical substance, or inoculation material composed of Fusarium fungi., or even agarwood resin from other trees. These treatments are expected to drive the resin formation in the heartwood. Wood that contains resin is harvested and further proceeds as raw material for cosmetic ingredients, medicine, perfumes, incense, insect repellent, as well as for preservative other products and accessories.

As inoculation methods are getting popular, more people in the community are trying to cultivate the agarwood in the plantation for subsequent inoculation experiments. Land owners might obtain seedlings from other areas, nurture the plant (fertilizing, watering, pruning, etc.) to a certain size that is thought would be ready to be inoculated. These people usually try to use high quality seedlings and work the land to make it suitable for supporting the agarwood growth. The agarwood seedlings are shading tolerant, but require sufficient sunlight to grow to adult stages. In Sumatra, agarwood is planted around palm trees at the age of 4 years with 8 cm in diameter (Suhartini, 2009). They are also found between trees in rubber and timber plantations.

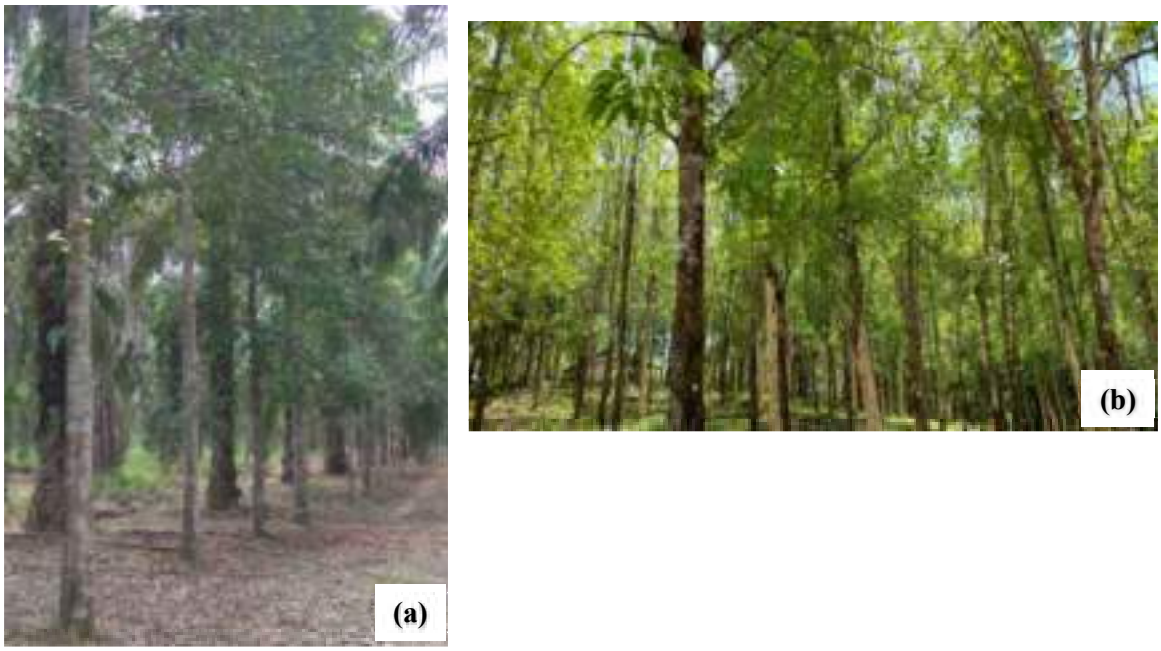

Figure 2. Agarwood "assisted production" (*A. malaccensis*) with palm oil in Bengkalis Regency, Riau Province (a) and agarwood partly "assisted production" and cultivated with rubber in Bengkulu Province (b).

Based on research in the last 15 years, the wild population of *A. malaccensis* in several areas in western Indonesia ranges from 0.5 to 8 individuals per hectare. Sumarna (2008) reported that in Tabir Ulu District Forest, Merangin Regency, Jambi Province, there were seven trees per unit group of elevation distribution (<100 m, 200 m, >200 m) and 287 seedlings of *A. malaccensis* found around the parental tree. The number of these seedlings will decrease in the next living phase (saplings and poles) as the competition for space is rising. Although seed production was reported to be high in Indonesia, the germination rate is considered to be low

and seed dispersal was limited (Turjaman et al., 2016). Setyawati (2010) said that from 50 plots sized (10m x 10m) in a survey area, there were only five plots with *A. malaccensis* trees, sized 20 cm, 25 cm, 28 cm, 30 cm and 34 cm in diameter respectively. pole level was not found. Only one sapling and three plots contain seedlings in the amount of 30, 85 and 102 respectively. The research which conducted by Partomihardjo et. al (2010) mentioned there was population of *A. malaccensis* and *A. beccariana* in natural forest of PLG Bengkulu approximately 10 ind/Ha and in Tahura Bengkulu Forest Park were 11 trees with diameter >50 cm. Meanwhile, in the Bangka-Belitung region, Yulizah et.al (2019) reported that there were nine individual trees of *A. malaccensis* with a density of 0.8 individuals/ha in Mount Maras National Park.

Meanwhile in Kalimantan, based on the research by Abdurachman (2009), there were 29 wild agarwood-producing trees (*A. malaccensis*) in the STREK Labanan Research Plot, Berau, East Kalimantan, covering an area of 48 ha. The wild agarwood tree density was 0.5 ind/ha. Furthermore Pribadi (2009) stated that in Kutai National Park there were 37 points of wild *A. malaccensis* in an area of 4883.75 Ha. The number of mature stands is always less than younger stages, considering that this species needs shades at the seedling stage but requires sufficient sunlight as they grow taller.

In the last 5 years, the "assisted production" population of *A. malaccensis* in Riau was recorded to have population density at most 8.13 individual/ha in Pericit Village and 0.58 individual/ha in Gosib, Siak Indrapura Regency. *A. malaccensis* was found in home gardens and plantations near the village (Yulizah et. al. 2022). People in these village obtain seedling from a mother tree in the nearby forest park (Figure 1). While, Setyawati (2010) reported that *A. malaccensis* stands in Central Lampung and West Lampung were found in cultivation areas where agarwood trees grow naturally on their land. In Bengkulu, Partomihardjo, et al. (2010) wrote there were 20 trees of *A. malaccensis* in farm garden in Bengkulu. Lately, Yulizah et. al (2019), also recorded population densities in Bangka-Belitung region i.e., about 0.14 individuals/ha in Pelangas Village; 4.1 individuals/ha in Lubuk Factory Village, and 2.7 individuals/ha in Serdang Village. The "assisted production" agarwood which was found in these villages is associated with palm oil, rubber, pepper and other tree plantations located in production forest areas.

Wild population of *A.malaccensis* in the western part of Indonesia is assumed to be decreasing as its natural habitat is also decreasing, indicated by the shrinking forest cover, especially in Sumatra and Kalimantan. Currently, most of the agarwood is harvested from areas owned by the community that are adjacent to the forest. Such population is left to grow naturally and harvested when it contains resin with trees that have reached a minimum bole diameter of 20 cm.

A species distribution model using maximum entropy algorithm found that the suitable habitat for *A. malaccensis* in Indonesia is around 26.45 million ha and moderately suitable around 30.48 million ha (In-prep, 2023). Based on the World Database on Protected Area, there is about 11.17 % of suitable habitat and 12.36 % of moderately suitable habitat that is found in conservation areas. The rest are found in non-conservation areas such as plantations, agriculture, or even in settlements. The suitable areas have *acrisols*, *ferralsols*, *gleysols*, *histosols*, and *nitosols* types of soil. Based on this result, the areal with suitable areas are still large, especially for developing new agarwood plantation.

Since the 2000s, there have been some attempts of planting agarwood in Bangka Belitung up to three million stands (Yulizah et. al., 2019). Similar trials also developed in other islands in western part of Indonesia (Figure 3, 4 & 5). Turjaman & Hidayat (2017) mentioned that the total population of planted agarwood in Indonesia is estimated to be about 3.4 million trees. Area with the highest number of estimated populations was Central Kalimantan (0.8 million trees), while the lowest was Jambi (818 trees). Sumatra and Kalimantan Island contribute more than 85% of agarwood plantations in Indonesia (Turjaman & Hidayat, 2017).

Based on the registration data recorded by the Management Authority, there are 31 agarwood farmers with the total number of *A.malaccensis* stands being 31,434 trees in the total area 74.94 hectares. It spreads out in Riau, South Sumatra, Bengkulu, Jambi and East Kalimantan. Not many owners of planted agarwood have registered their stands since such an administrative process is deemed to be tedious and time consuming. Although planting agarwood today is not as popular as ten years ago, most people would keep and nurse stands of agarwood that grow in their lands in the hope for future return.

Figure 3. Agarwood *Aquilaria malaccensis* plantation in Trubus Village, Central Bangka Regency, Bangka-Belitung

Figure 4. Agarwood *Aquilaria malaccensis* plantation in Langkat, North Sumatra

Figure 5. Agarwood *Aquilaria malaccensis* plantation in Siak Regency, Riau

III. Threats

The major threats to *Aquilaria malaccensis* are as follows:

1. There are non-official reports of Illegal harvest from the community that live around the forest area. However, its trends have been declining due to the lower return and higher uncertainties of product availability compared to capital invested. On the other hand, forest rangers are increasing their patrols where the species occurred and monitors product distribution.

2. Lowland forested areas where the species were naturally distributed were converted to mining concessions, palm oil plantations, farms, and settlements.

3. Fungal and pest attacks, (esp *Heortia vitessoides*) were observed in several nurseries which were dedicated for replanting and farming areas. However, studies have shown that certain practices have effectively managed these threats.

These major threats were considerably managed due to great exposure on the species' products. Authorities have been promoting and supporting the species cultivation in various types of land use over the last decade. Local authorities have developed several Forest Management Unit (FMU/KPH) to coop with agarwood production, along with mixed planting in palm plantation, community's forest and farms.

IV. Trade of the specimens

a) Information on the levels of legal trade in the species in the 5 most recent years

Trade in agarwood is controlled with a quota, set on the basis of combined category, i.e., species group and distribution area. *A. malaccensis* specimens are obtained from areas in Sumatra and Kalimantan. Those specimens may be sourced from wild populations, "assisted production" areas and plantations (registered or non-registered). Exported products consist of wood chips, oil, exhausted or non-exhausted powder, and decorative carvings (Figure 6). Most wood chips are processed in Java. Raw wood material with low- to no-resin content transported from harvest location (Figure 7) to wood processing workshops in the same province or directly to Java. Logs are turned to chips, sorted and refined to shape as ordered. These chips then are being enhanced by an impregnation process to contain a higher percentage of resin (Figure 10). The resins are extracted from some low resin-content wood or known as decaying logs from Papua. Decaying log is dead wood harvested from the lowland freshwater swamp in Regency Asmat and Mappi in the southern part of Papua Province (Figure 8). The area was once an active forest concession in the 80s, extracted for their valuable timber that was then abandoned. There are logs of deemed non-valuable wood, sank in the mud which later were found to contain aromatic substances and known by the locals as decaying logs. Extraction of these decaying logs is controlled by quota in the last four years. (Figure 10).

Figure 6. Agarwood products chips (a), non exhausted powder (b), decorative log (c), oil (d), exhausted powder (e).

Figure 7. Agarwood harvested from an " assisted production" in Bengkulu

Figure 8. Decaying logs from Mappi and Asmat, Papua Province

Harvest quotas are set for individual provinces based on available information on standing stock of all types of population, harvest location distribution, permit-holder performance in trading (shown by how their shared quota is taken up) and subsequent proposal. The level of trade for the last five years is as reported in annual reports (Table 1 and Figure 9), which are based on issued permits.

Quota for *A. malaccensis* in the last five years are set to continuously be lower in the following years, in order to stimulate workers to register standing stock in their plantation or farmland. National regulation requires that specimens declared as "non-wild harvest" must be verified and only be taken from registered plantations/farmland. Many people that own planted agarwood, especially those with a small number of trees, hold back to register as they consider the administration is exhausting. Such assumptions lead to alternative distribution of specimens through the established management that is controlled by means of quota. With current productivity, this quota is mostly taken up (Figure 9).

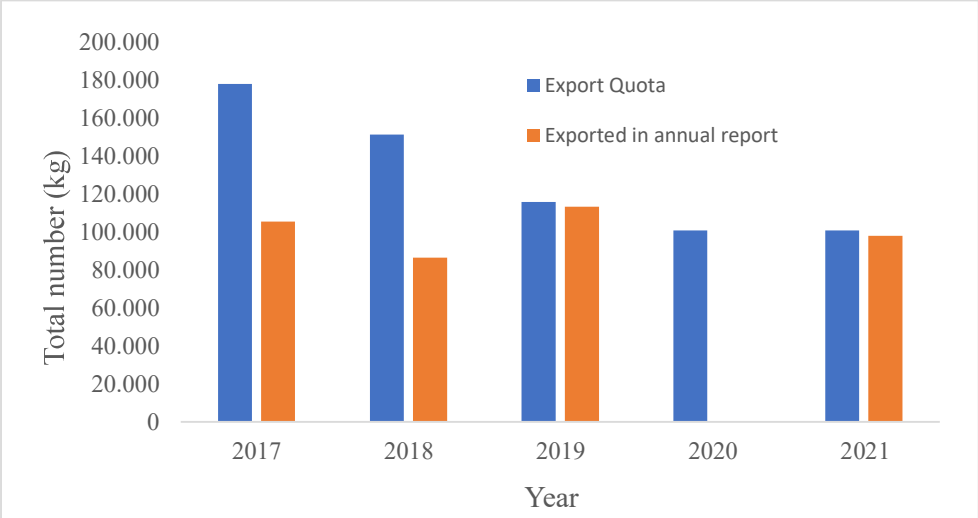

Figure 9. Quota of *A. malaccensis* 2017-2021

Figure 10. The processing of impregnated woods.

b) Levels of illegal trade

There are no reports of illegal trade in 2017 and 2018. Only one instance recorded for no-legal document transportation of agarwood in 2019, three instances recorded in 2020 as well as 2021. These instances involve very small amounts of agarwood compared to the legal ones.

c) Information on procedures for identification of specimens in trade to the species level.

Products of agarwood that are traded across the border, predominantly in the form of chips, some portion of powder, oil, decorative carving and finished products such as incense. These end products are similar in shape between species. However, the identification to the species level can be trace from the transport documents, particularly for specimens from the wild, registered hunters would be required to describe their finding to their collector/dealer who must include such information in the permit submission. The most workable identification is at the beginning of harvest. Standing stock are distinguishable morphologically from their flower, fruit, leaf and wood fiber. Many people in villages plant *A. malaccencis* as this species has the most abundant seedling and is more preferred in the market. For specimens from the wild, registered hunters would be required to describe their finding to their collector/dealer who must include such information in the permit submission.

d) Information on any export quota in place for the species and details for 5 most recent years.

All of the export quotas have been published on the CITES website except for 2019. Table 1 shows that in most of the years, the amount of exports, according to the CITES trade database, are less than export quota, as also recorded in the annual reports, except for 2017 where the quota was fully taken up. However, the exported amount for 2021 shown in the CITES trade database is different from the annual report, amounting to 68 kg discrepancies. The cause of this discrepancy is unknown.

Table 1. Quota and exported in annual permit amount of *A. malaccensis*

Year	Export Quota (kg)	Exported (kg) in CITES Trade database	Exported (kg) in Annual report
2017	178,500	105,736	105,736
2018	151,725	86,448	86,648
2019	116,069	113,467	113,645
2020	101,000	98,241	98,750
2021	101,000	98,297	98,229

e) Information on artificially propagated specimens is distinguished in trade from wild-harvested specimens.

Agarwood specimens are exported mostly in the form of wood chips and small portions of oil, powder or finished products such as assorted incense and decorative carvings (Figure 6). Similar to distinguishing species, most of these specimens are not readily differentiated between wild-sourced with those of non-wild-sourced. Wild-sourced wood chips might be differentiated by their irregular size and shape with dark color (Figure 11a), while processed wood chips derived from plantation or "assisted production" trees are often packed in similar size and shape, some with rather brownish colour but might also be darker (Figure 11b-e). Powder is served as material for oil extraction while exhausted powder is a form of remains from such extraction and used in production of a variety of incense (Figure 6). They are made from wood with low contained resin, usually derived from plantation or assisted production trees in which the wood is light in colour (light brown).

Figure 11. *A. malaccensis* chips from wild (a), from "assisted production" and plantation (b), (c), (d), (e).

Agarwood trees that contain a decent percentage of resin are randomly found in the deep forest. Only persons with particular skill are able to identify such individual trees right away, of which the number is very few and old. A hunting session would require a long distance taken by foot and about a month of exploration. This condition has made hunting agarwood become a highly-cost activity (Hidayat, et. al., 2020). On the other hand, agarwood trees with

effortless access in kampongs (villages), farmland, rubber and palm-oil plantations are readily available (Figure 2). Many people in Sumatra and Kalimantan plant them in quite a number where the seedlings were obtained freely from the local government in 2011-2012. Logs and various sizes of chips with low- to no-content of resin derived from harvested standing stock that grows in these areas are sent to Java for further enhancement process (see Figure 6 and Figure 10). Shipment of these specimens would require inspection by local field officers authorized to grant domestic transport permits (SATS-DN). This upstream documentation becomes the main reference for differentiating specimens in the following pathway.

V. Species Management

Species management of *A. malaccensis* exported with source code W is implemented by imposing an annual quota. The quota is set based on available information on population, distribution, level of trade activities per province, indicated by previous years used quota and proposed quota for the following years. The mechanism of setting quota is outlined in Figure 12.

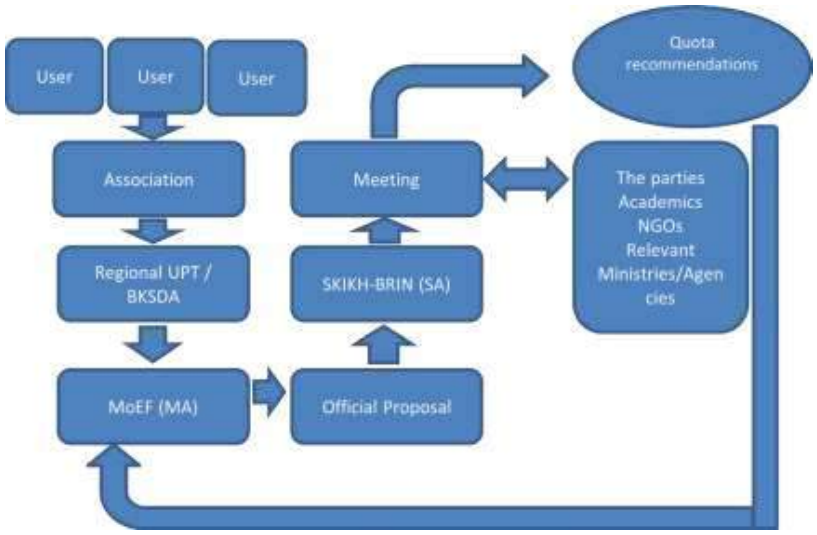

Figure 12. The Proposed harvested Quota of Wild Plant and Animal Species Flowchart

The quota is distributed to domestic permit holders who operate in specific harvest areas. Permit holders usually employ several registered agarwood hunters. These hunters are varied in skill, and can be categorized as forest and non-forest hunter. Those who operate in non-forest areas would differentiate between registered and non-registered plantations.

Stands in registered plantations can be harvested following verification by the local officer. There is no quota being imposed for agarwood produced in registered plantations but verification would be essential to confirm that the amount of harvest is corresponded with the size of specified population. There are administrative requirements that are deemed to be exhausting which hesitate owners to register their plantation.

The permit holder is the one who handles the administrative submission for transporting agarwood. Every consignment from the source location to another point of transport and so forth, must be accompanied by an appropriate transport permit (SATS-DN) which states the type and amount of the package, date and locations of transport. This transport permit must be based on minutes of inspection (BAP) written by authorized officers which verified the actual physical consignment to be transported as declared by permit holders. Both documents must

be produced at every point of transport and any changes to the consignment must be declared, which includes the transformation of raw material to products. The term raw material means low- or no-resin content of agarwood, that through some process, is being transformed to product, in one or more processing facilities. The product might be in the form of wood chips of varying qualities, oil, powder, decorative carvings and various shapes of incense (Figure 6). A domestic permit holder might also be an export permit holder. An export permit (SATS-LN) or CITES permit can only be granted based on a correct domestic transport permit (SATS-DN) and correct minutes of inspection (BAP). These transport documents also become the tool for local authority (BKSDA) to monitor the utilization of quota and evaluate performance of a permit holder. The CITES permit became a required document for wildlife export-import activities in the single window permit system established by the government. Please see Figure 13 for the complete procedure.

The following illustration is an example of yield calculation of agarwood from a plantation in Merangin Regency in Jambi Province. A log of agarwood with bole diameter 26.1 cm and 15 m long, would weigh 191 kg. With a known water content of 46.3% (Wiriadinata, et. al., 2010), such a log would have 102.57 kg dry weight. A monoculture plantation would contain 1111 individual trees/ha, while in a mixed plantation with palm-oil trees 333 individual trees/ha. For an annual quota (in this example, year 2021) 101000 kg, there will be 985 individual trees at correct size being felled. Such an amount might be expected from 0.89 ha of monoculture plantation or 2.95 ha of mixed (palm oil) plantation. Suppose that every log is anticipated to contain only 10% resin from such dry weight, there will be 9,847 trees being harvested. This number might be expected from 8.86 ha monoculture plantation or 29.54 ha mixed (palm oil) plantation. This number would readily be met by plantations in Sumatra only. Further elaboration for estimation of harvested agarwood and its corresponding imposed quota between 2017 to 2021 is presented in Table 2.

Table 2. Estimated area and number of harvested trees for its corresponding quota.

Year	Annual quota (kg)	Number of trees (for such dried weight)	Area (for such dried weight, in ha)		With assumption only 10% resin per dried weight		
					Number of trees	Area(ha)	
			Monoculture plantation	Assisted production		Monoculture plantation	Assisted production
2017	178500	1740.32	1.5663	5.2210	17403.25	15.6629	52.2098
2018	151725	1479.27	1.3313	4.4378	14792.76	13.3135	44.3783
2019	128966	1257.38	1.1316	3.7721	12573.82	11.3164	37.7215
2020	128966	1257.38	1.1316	3.7721	12573.82	11.3164	37.7215
2021	101000	984.72	0.8862	2.9542	9847.22	8.8625	29.5417

VI. Law and Regulation

National regulation for utilization of wild plants and animals is mostly contained in the Minister of Environment and Forestry (MoEF) regulation as this ministry is assigned to coordinate CITES implementation and govern Appendix II species management. Those regulations are as follow:

1. Law No. 5/1990 on Conservation of Biotic Natural Resources and Ecosystems
2. Government Regulation No. 7/1999 on the Preserving Plant and Animal Species.
3. Government Regulation No. 8/1999 on the Use of Wild Plant and Animal Species.
4. Minister of Forestry Decree No. 447/Kpts-II/2003 on Administration Directive of Harvest or Capture and Distribution of the Specimens of Wild Plant and Animal Species.
5. Minister of Environment and Forestry Regulation No. P.106/ MENLHK/SETJEN/KUM.1/12/2018 on the Second Amendment to the Minister of Environment and Forestry Regulation No. P.20/ MENLHK/SETJEN/KUM.1/6/2018 on Protected Plants and Animals.
6. Directorate General of Forest Protection and Nature Conservation Regulation No. P.25/IV-SET/ 2014 on Administration of Agarwood Plantation Registration
7. Minister of Trade Regulation No.18 Year of 2021 Jo Minister of Trade Regulation 40 Year of 2022 on Export Prohibited Goods and Import Prohibited Goods
8. Minister of Trade Regulation No.19 Year of 2021 Jo Minister of Trade Regulation No.12 Year of 2022 on Export Policy and Regulation
9. Minister of Finance Decree No. 1821/KM.4/2019 on List of Restricted Goods for Export Based on the Minister of Trade Regulation No. 122 of 2018

Based on Government Regulation No. 7/1999 on the Preserving Plant and Animal Species dan Minister of Environment and Forestry Regulation No. P.106/ MENLHK/SETJEN/KUM.1/12/2018 on the Second Amendment to the Minister of Environment and Forestry Regulation No. P.20/ MENLHK/SETJEN/KUM.1/6/2018 on Protected Plants and Animals stated that agarwood is listed as an unprotected species. But the utilization is regulated by Government Regulation No. 8/1999 on the Use of Wild Plant and Animal Species dan Minister of Forestry Decree No. 447/Kpts-II/2003 on Administration Directive of Harvest or Capture and Distribution of the Specimens of Wild Plant and Animal Species.

Following the aforementioned regulation, distribution of appendix II species must be managed with a controlled extraction from the wild and a set of documentation (Figure 13). The annual national quota is set for each province by the management authority based on recommendation from the scientific authority. Figure 13 shows that those who gather agarwood are required to have a harvest/capture permit. Business actors carrying out domestic and foreign distribution are required to have a distribution permit. Such actors would have several registered gatherers. Since the annual quota is distributed to these workers, permit holders must report their activities to the government. Every transported specimen or product of appendix II species must be accompanied by a domestic transport document (SATS-DN) issued by the provincial unit of Ministry of Forestry (BKSDA), and a cross-border transport (SATS LN) or CITES permit issued by the Directorate General (DG) of Forest Protection and Nature Conservation, or (following nomenclatural changes) DG of Nature Resource and Ecosystem Conservation, in the event of export. Only permit holders who may apply such documentation (Figure 13).

In the case of agarwood from plantation, agarwood harvested from such areas will not be limited by an amount of quota. As long as the specimens are confirmed and verified by the field officer to have originated from that mentioned plantation, they may transport as much as the plantation could produce. However, those plantations must be registered and documented before harvest with sufficient information as regulated in Directorate General of Forest Protection and Nature Conservation Regulation No. P.25/IV-SET/ 2014 on Administration of Agarwood Plantation Registration. Such documentation is deemed exhaustive by the locals,

especially those in areas away from the provincial capital, which makes the progress of registration rather slow (Figure 13).

The administration of export requires further verification of other documents, i.e., phytosanitary certificates, export approvals from the Ministry of Trade and export/import notifications from the customs office. The process of document verification could be monitored by a website application called Indonesia National Single Window (INSW). The INSW is a single window service operated by an institution under the Ministry of Finance, to handle related export-import and/or national logistics documents electronically, which includes customs documents, quarantine documents, licensing, port/airport documents, etc. Whenever a documentation fails in the system, the process of permitting will not be continued.

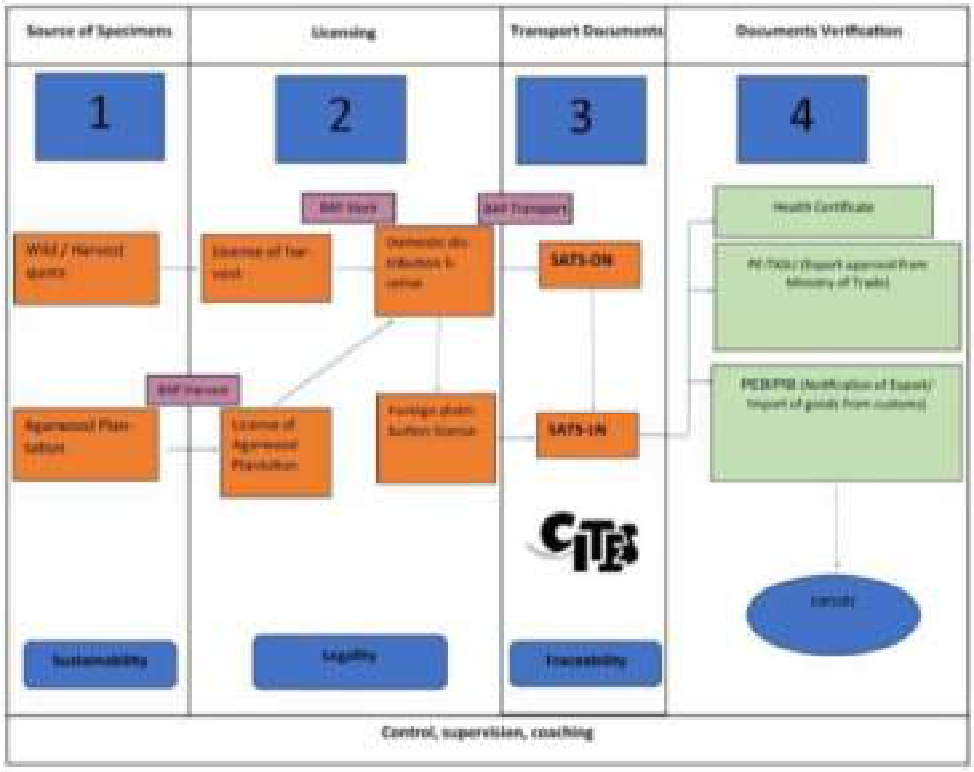

Figure 13. The management procedure under the national regulation.

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Assessment of the trade of specimens with source code "W" for the species *Gyrinops* spp.

I. Non-Detriment Finding Process

The Scientific Authority (SA) establishes teams for evaluating trade of plant species, consisting of personnels from different research centres in the National Research and Innovation Agency (Indonesian: Badan Riset dan Inovasi Nasional-BRIN) and some personnels from the Management Authority (MA) of the Ministry of Environment and Forestry. The team gathers information from various sources, verified their validity at its best, based on scientific principles, and categorized their degree of reliability. Verification is carried out through discussions and visits to points of production, and documentation. Information and results of studies are often obtained sequentially, in accordance with the process and dynamics of trading activities.

The Management Authority (MA) and their field officers are SA's principal teammates in compiling the data, and prepare the assessment and reports. They are maintaining historical records of trade licensing and corresponding activities. Another contributor who also plays the role in acquiring relevant data and information is the trader association. They hold documentation of their members' activities and often facilitate visit to processing sites. Other researchers from BRIN and universities are also involved in field studies on different aspects.

The SA and MA evaluate the imposed annual quota for appendix II species by conducting several meetings and data gathering, starting in the eighth and ninth months of each year. The latest quota and the number of products used were obtained from the records of permit letters that have been granted become the starting point to set the annual quota. Whenever necessary, extra field inspection would be suggested by the SA to the field officers whose results will be reported as additional data/information to be discussed in the final meeting. The evaluation result will become the bases for the quota setting for the following years.

II. Review of the population

Decaying log (*Gyrinops* spp.) is derived from dead wood harvested in the lowland freshwater swamp in Asmat and Mappi Regency in the southern part of Papua Province (Figure 1). The area was once an active forest concession operated during the 80s up to 90s and has been abandoned since then. There are logs of deemed non-valuable wood, sank in the mud which later were found to contain aromatic substances and known by the locals as decaying logs. There was agarwood hunting in Papua in 1995 with low to no-resin content wood were left in the mud (Pers. comm). These sunken-woods then were excavated in 2000 and was considered valuable wood. Since then, extracting decaying logs became the local's main livelihood in Asmat Regency (Soehartono & Newton, 2002) and is still continuing today. Such livelihood is now also found in Mappi Regency. Extraction of these decaying logs is controlled by setting up the annual quota for the last four years.

Alhamd & Rahajoe (2018) reported that the decaying logs are known to originate from Asmat and Mappi Regency. The term "decaying logs" refers to large pieces of logs and roots with a diameter about 50 cm sunken in the swamp area. The swamps are relatively an open area, located in the local's backyard and the areas within a walking distance from the village. The survey was conducted by observing the locals' people when excavating the logs and recording tree species naturally growing around the area.

Figure 1. Extracting decaying log in Asgon, Mappi, Papua

Searching the correct location for decaying log extraction would involve 10-30 persons with an iron hooked-point stick 150-200 cm length. Workers stick the iron into the soft ground repeatedly in the hope that its edge will stumble to the sunken-log (Figure 2). Whenever the search is giving a confidence result, the team will prepare for excavation.

Figure 2. Finding decaying log in the mud: worker with iron stick try to find the decaying log (a-b), iron hook (c), wood flakes which stuck in the hook (d)

The excavation is carried with simple tools, i.e., machetes and long logs, and removed by hand. The depth of excavation is varied, 50-180 cm deep in a soggy swamp (Figure 3). A group of people will hollow the ground at the correct point, which later will turn to be a pool

of mud. A volunteer dives into the mud to locate the logs, then the logs will be removed with just man power. Large logs will be cleaned and split into 2-3 parts to allow carriage. They pack the split wood using sagoo (*Metroxylon sagu*) leaves that serve as backpack carriage (Figure 4) and transport them to a point of collection.

Figure 3. Excavation process of decaying log

Figure 4. Transporting decaying log

Based on a record from the Nature Conservation Office in Papua (2017), there are 814,436.86 of swamp in Asmat and Mappi ha (14% from total areas of two regions) that assumed to contain decaying logs, distributed in 22 districts. They reported that 30% communities in Mappi earn their income from the decaying logs (about 8,000 people as decaying hunters and about 350 people operating point of collection). In Asmat there are 45% of communities depend their living from decaying log (11,000 by extracting decaying logs and 531 people operating point of collect) (Pers.comm). This trend is relatively retained until today.

III. Threats

Not applicable. There are no significant threats to decaying logs as it is a non-living material (dead wood). The extraction and excavation activities are not resulted in disturbing the forest as the swamp are located in open areas.

IV. Trade of the specimens

a) Information on the levels of legal trade in the species in the 5 most recent years

Specimens in the trade under the name *Gyrinops* sp. are derived from the sunken-wood known as decaying log. There is no known trade using the term "decaying log" that is taken from living stands. The extraction and distribution of decaying logs is regulated using quota starting in 2020 (see Table 1). With such limitation, it is expected that over-exploitation can be avoided and disturbance to swamp ecosystems would be minimalized. The number of quotas is calculated through estimation of potential areas that contain decaying logs in the two regencies: Asmat and Mappi. A survey in 2018 has shown the possible number of decaying logs per hectare in the area (Alhamd & Rahajoe (2018) and Alhamd et. al. (2019)). The quota set per year is always less than the estimated the total potency, which is around 600-800 tons per year as presented in Table 1.

The decaying logs stacked up at the point of collection and sorted. Most of the volume is transported by cargo ship with correct domestic transport documents (SATS-DN) to Probolinggo, East Java. It requires two to more than four weeks to deliver the logs to the next destination points. A small portion of sorted logs that are considered to have more economic value is sent by air to other cities in Java, e.g., Jakarta or Surabaya. In Java, the wood is processed to extract the resin (Figure 5) or sorted, cleaned and shaped as chips, smaller logs as and additional processed into incense (Figure 6). The quota was started to be imposed in 2020 at an amount of 75 tons (Table 1).

Figure 5. Liquid resin resulted from decaying log.

Figure 6. Decaying logs, unprocessed decaying log (a), decaying log as decorative (b), chips (c,d), varied of incense from decaying log (e,f).

Table 1. Quota and exported in annual permit amount of decaying logs.

Year	Export Quota (kg)	Exported (kg) in Annual report
2017	0	0
2018	0	0
2019	0	0
2020	75,000	75,000
2021	100,000	99,000

b) Levels of illegal.
There is no formal report of illegal trade in decaying logs.

c) Information on procedures for identification of specimens in trade to the species level.

The decaying logs are traded domestically in the form of logs/block, chips, powder and resin. Some logs are milled to form non-exhausted powder and go through a set of processes to produce resin and wasted material known as exhausted powder (Figure 7). Some other logs were sorted, cleaned and shaped to the correct size of chips. The chips are enhanced with the resin through a process known as impregnation. Different customers have their own requirement for the processed products.

The logs before the impregnation process are easily distinguished from other forms of agarwood by its lighter and softer texture. However, to differentiate the logs to species level is very difficult. Research has been carried out in 2018 to identify chips to species level using DNA (Pers.comm). However, the DNA extraction yields low concentration and fragmented DNA. Such conditions only allow the identification to genus level. Therefore, upstream documentations, which are issued by provincial units (BKSDA) in Asmat and Mappi regency, are vital as references to distinguish specimens.

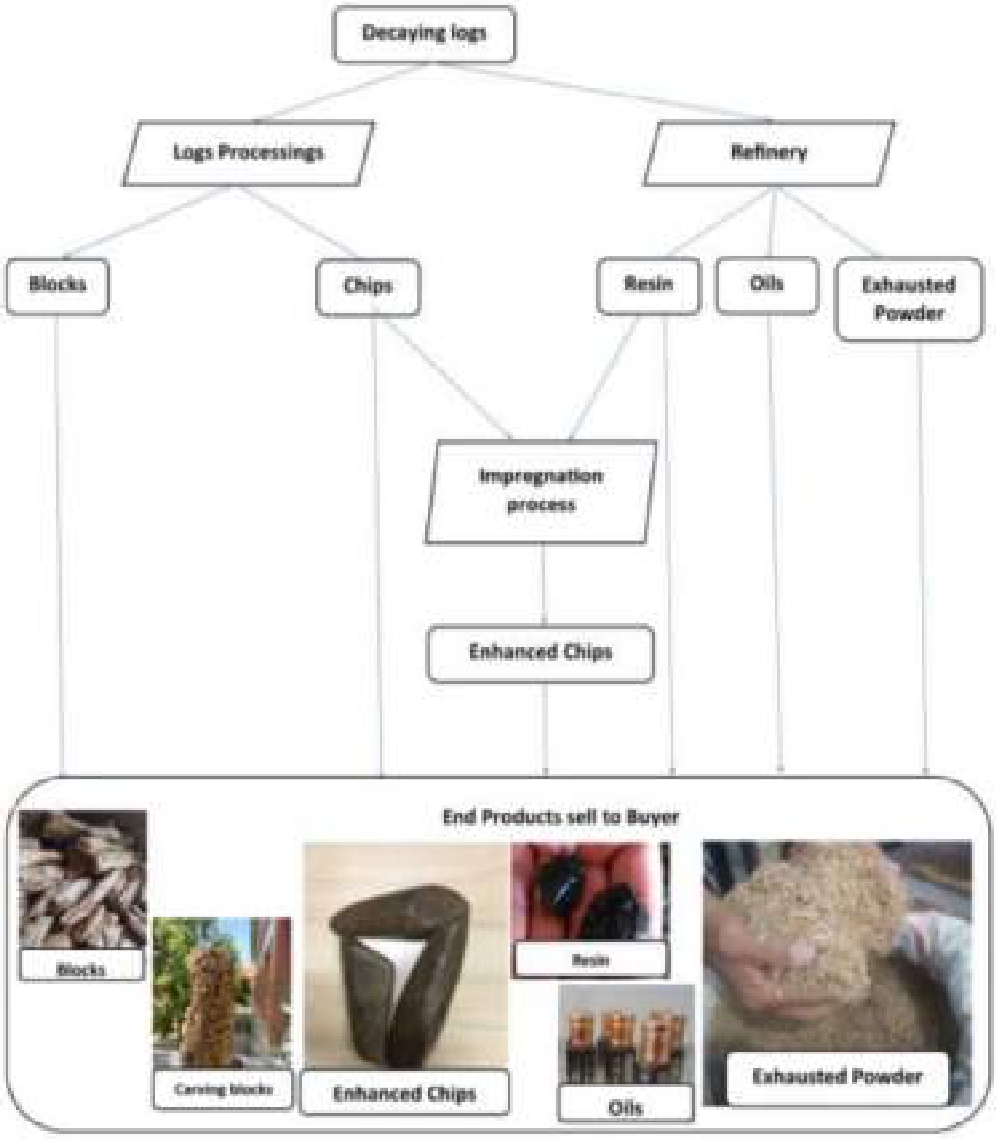

Figure 7. The processing of impregnated woods.

d) Information on any export quota in place for the species and details for 5 most recent years.

The annual quota for decaying logs is published in CITES website. However, there are some nomenclatural discrepancies. For the year 2020, there are three different names used in different documents, while two names were used in 2021 (see Table 2,3 and 4). All names refer to the same specimen, the decaying log from Asmat and Mappi. We found that this was caused by different interpretations by different officers in accommodating a newly regulated specimen. We provide a compiled correct number of annual quotas in Table 1.

Table 2. Total of export Quota of *Gyrinops* spp. (decaying logs)

Year	Export Quota (kg)	Exported (kg) in CITES Trade database	Exported (kg) in Annual report
2017	0	0	0
2018	0	0	0
2019	0	0	0
2020	0	300	300
2021	100,000	54,375	54,875

Table 3. Quota of *Gyrinops decipiens* (decaying logs)

Year	Export Quota (kg)	Exported (kg) in CITES Trade database	Exported (kg) in Annual report
2017	0	0	0
2018	0	0	0
2019	0	0	0
2020	75,000	0	0
2021	0	0	0

Table 4. Quota of *Gyrinops versteegii* (decaying logs)

Year	Export Quota (kg)	Exported (kg) in CITES Trade database	Exported (kg) in Annual report
2017	0	0	0
2018	0	0	0
2019	0	0	0
2020	0	73,718	74,700
2021	0	44,125	44,125

e) Information on artificially propagated specimens is distinguished in trade from wild-harvested specimens, if applicable.
Not applicable

V. Species Management

Management of decaying logs exported with source code W is implemented by imposing an annual quota. The quota is set based on estimation of potential yield from the total area of known swamps that contain decaying logs in Mappi and Asmat. The mechanism of setting quota is outlined in Figure 8.

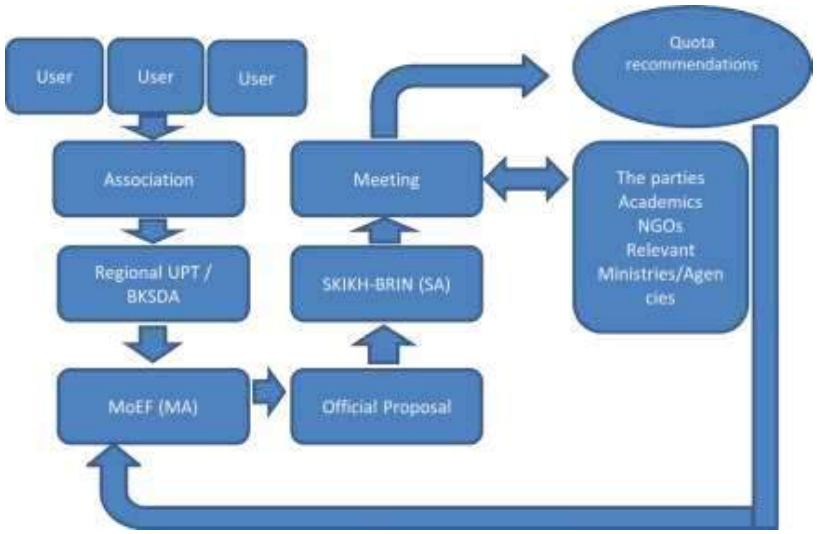

Figure 8. The Proposed harvested quota of wild plant and animal species flowchart

The quota is distributed to domestic permit holders who operate in specific areas. Permit holders employ groups of local people who search and extract decaying logs from the mud. They usually establish a point of collection that also serves as a drying and initial sorting facility in the nearby area. Such facilities and the workers involved are registered and might be inspected by field officers in the provincial unit at any time.

The permit holder is the one who handles the administrative submission for transporting agarwood. Every consignment from the source location to another point of transport and so forth, must be accompanied by an appropriate transport permit (SATS-DN) which states the type and amount of the package, date and locations of transport. This transport permit must be based on minutes of inspection (BAP) issued by authorized officers which verified the actual physical consignment to be transported as declared by permit holders. Both documents must be produced at every point of transport and any changes to the consignment must be declared, which includes the transformation of raw material to products. The product might be in the form of wood chips of varying qualities, oil, powder, decorative carvings and various shapes of incense. A domestic permit holder might also be an export permit holder. An export permit (SATS-LN) or CITES permit can only be granted based on a correct domestic transport permit (SATS-DN) and correct minutes of inspection (BAP). These transport documents also become the tool for local authorities (BKSDA) to monitor the utilization of quota and evaluate performance of a permit holder. The CITES permit became a required document in the export-import single window system established by the government. Regular inspection and monitoring of activities in the point of collection as well as in product processing sites become the main tools in controlling the distribution of decaying logs. The resulting reports determine whether a quota should be lower in the following years, or extraction is temporarily or permanently stopped or re-continued. Please see Figure 9 for the complete procedure.

VI. Law and Regulation

National regulation for utilization of wild plants and animals is mostly contained in the Minister of Environment and Forestry (MoEF) regulation as this ministry is assigned to coordinate CITES implementation and govern Appendix II species management. Those regulations are as follow:

1. Law No. 5/1990 on Conservation of Biotic Natural Resources and Ecosystems
2. Government Regulation No. 7/1999 on the Preserving Plant and Animal Species.
3. Government Regulation No. 8/1999 on the Use of Wild Plant and Animal Species.
4. Minister of Forestry Decree No. 447/Kpts-II/2003 on Administration Directive of Harvest or Capture and Distribution of the Specimens of Wild Plant and Animal Species.
5. Minister of Environment and Forestry Regulation No. P.106/ MENLHK/SETJEN/KUM.1/12/2018 on the Second Amendment to the Minister of Environment and Forestry Regulation No. P.20/ MENLHK/SETJEN/KUM.1/6/2018 on Protected Plants and Animals.
6. Directorate General of Forest Protection and Nature Conservation Regulation No. P.25/IV-SET/ 2014 on Administration of Agarwood Plantation Registration
7. Minister of Trade Regulation No.18 Year of 2021 Jo Minister of Trade Regulation 40 Year of 2022 on Export Prohibited Goods and Import Prohibited Goods
8. Minister of Trade Regulation No.19 Year of 2021 Jo Minister of Trade Regulation No.12 Year of 2022 on Export Policy and Regulation
9. Minister of Finance Decree No. 1821/KM.4/2019 on List of Restricted Goods for Export Based on the Minister of Trade Regulation No. 122 of 2018

Based on Government Regulation No. 7/1999 on the Preserving Plant and Animal Species dan Minister of Environment and Forestry Regulation No. P.106/ MENLHK/SETJEN/KUM.1/12/2018 on the Second Amendment to the Minister of Environment and Forestry Regulation No. P.20/ MENLHK/SETJEN/KUM.1/6/2018 on Protected Plants and Animals stated that agarwood is listed as an unprotected species. But the utilization is regulated by Government Regulation No. 8/1999 on the Use of Wild Plant and Animal Species dan Minister of Forestry Decree No. 447/Kpts-II/2003 on Administration Directive of Harvest or Capture and Distribution of the Specimens of Wild Plant and Animal Species.

Following the aforementioned regulation, distribution of appendix II species must be managed with a controlled extraction from the wild and a set of documentation (Figure 9). The annual national quota is set for each province by the management authority based on recommendation from the scientific authority. Figure 9 shows that those who gather agarwood are required to have a harvest/capture permit. Business actors carrying out domestic and foreign distribution are required to have a distribution permit. Such actors would have several licensed gatherers. Since the annual quota is distributed to these workers, permit holders must report their activities to the government. Every transported specimen or product of appendix II species must be accompanied by a domestic transport document (SATS-DN) issued by the provincial unit of Ministry of Forestry (BKSDA), and a cross-border transport (SATS LN) or CITES permit issued by the Directorate General (DG) of Forest Protection and Nature Conservation,

or (following nomenclatural changes) DG of Nature Resource and Ecosystem Conservation, in the event of export. Only permit holders who may apply such documentation (Figure 9).

In the case of decaying logs, workers (who extract the logs from the mud) operate in a group that is affiliated to a permit holder. This permit holder has a point of collection that also serves as an initial process facility such as sorting and drying. Field officer has the details of such a facility and might inspect the stock and ongoing activities apart from the scheduled verification for transport permission. Permit holders are also required to promote plantations in their operating area with seedling obtained from the nearby standing stock.

The administration of export requires further verification of other documents, i.e., phytosanitary certificates, export approvals from the Ministry of Trade and export/import notifications from the customs office. The process of document verification could be monitored by a website application called Indonesia National Single Window (INSW). The INSW is a single window service operated by an institution under the Ministry of Finance, to handle related export-import and/or national logistics documents electronically, which includes customs documents, quarantine documents, licensing, port/airport documents, etc. Whenever a documentation fails in the system, the process of permitting will not be continued.

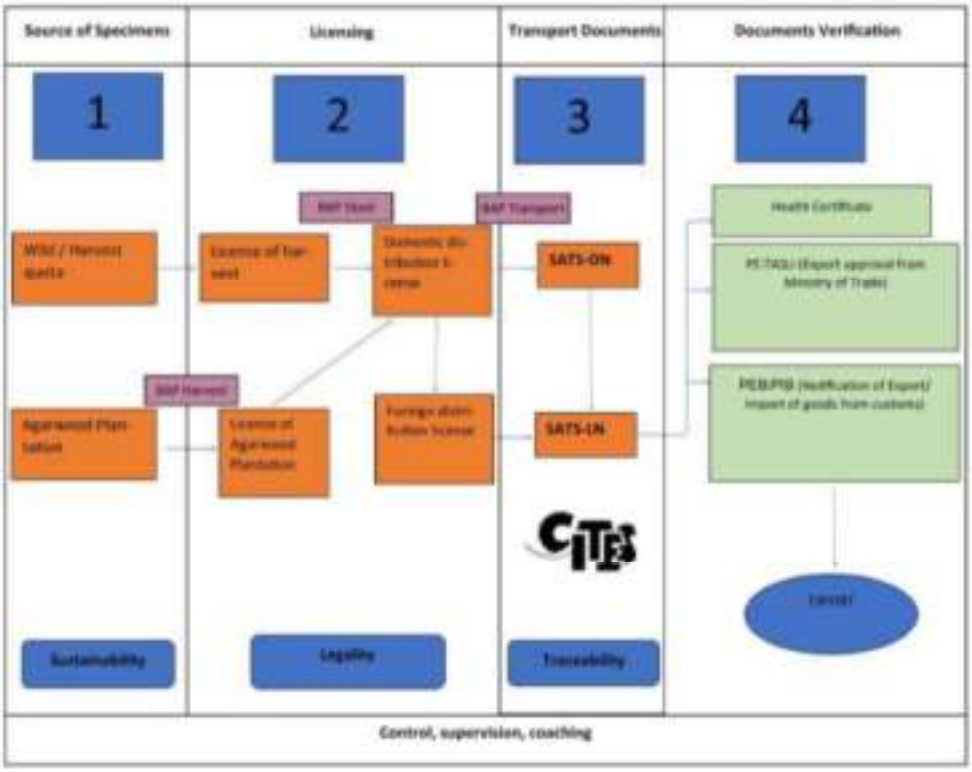

Figure 9. The management procedure under the nasional regulations.

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Indonesia

To UNEP-WCMC

MINISTRY OF ENVIRONMENT AND FORESTRY REPUBLIC OF INDONESIA
DIRECTORATE GENERAL OF NATURAL RESOURCES AND ECOSYSTEM CONSERVATION
DIRECTORATE OF BIODIVERSITY CONSERVATION OF SPECIES AND GENETIC
Manggala Wanabakti Building, Block VII, 7th Floor
Gatot Subroto St., Jakarta 10270 – Telephone/ fax: 62-21- 5720227

1 November 2023

Our Ref: S.792 /KKHSG/PSG1/KSA.2/11/2023

To: **Ms. Ivonne Higuero**
CITES Secretariat
International Environment House
Chemin des Anemones
CH-1219 Chatelaine Geneva
Switzerland
Email: info@cites.org; species@unep-wcmc.org

Subject: Information on Species Subject to the CITES Review of Significant Trade concerning *Aquilaria malaccensis* and *Gyrinops* spp.

Dear Madam,

Referring to your letter Ref: DR/TC/RST/2023 dated 22nd September 2023 regarding Review of Significant Trade in specimens of Appendix-II species [Resolution Conf. 12.8 (Rev. CoP18)] and the letter from UN Environment Programme World Conservation Monitoring Centre dated 5th October 2023 regarding above mentioned, herewith the attachment of response to the request information on *Aquilaria malaccensis* and *Gyrinops* spp..

Thank you for your kind attention and continuous cooperation.

Yours sincerely,

Indra Exploitasia, DVM
Acting Director of Biodiversity Conservation of Species and Genetic
Email: dit.kkh@gmail.com, subditkonvensi.kkh@gmail.com

cc.:
1. Director General of Natural Resources and Ecosystem Conservation, MoEF;
2. Director of Secretariat of Scientific Authority for Biodiversity, NRIA.

Response to request for information on *Aquilaria malaccensis* in Indonesia

1. Distribution of *Aquilaria malaccensis* in Indonesia, including the extent of occurrence and area of occupancy in the forests, plantations and protected areas

In Indonesia, the range of native distribution of *A. malaccensis* is in the western part of the country i.e., Sumatra and Kalimantan. However, based on the herbarium specimen, this species also recorded from small islands near Sumatra, i.e., Bangka, Belitung, Karimun and Singkep. Agarwood *A. malaccensis* may be found in the forest (state forest and community forest) or non-forest areas (Figure 1, 2, 3 & 4). At the state forest area, this species grows both in the conservation area (e.i., natural reserve or national parks) and in the production forest. In the past, people hunted agarwood only in the production forest of Kalimantan and Sumatra and spent weeks to months. The resulted gathering is known as wild agarwood.

Wild population of *A.malaccensis* in the western part of Indonesia is assumed to be decreasing as its natural habitat is also decreasing, indicated by the shrinking forest cover, especially in Sumatra and Kalimantan. Currently, most of the agarwood is harvested from areas owned by the community that are adjacent to the forest (Figure 1). Such population is left to grow naturally and harvested when it contains resin with trees that have reached a minimum bole diameter of 20 cm.

Figure 1. Wild of *A. malaccensis* in community forest, Siak Regency, Riau Province (a), Bengkulu Tengah, Bengkulu Province (b).

Currently, there are sporadic land-use changes. This has caused forested areas for hunting agarwood become lessen. The lands are turned into palm oil or rubber plantations.

However, there are agarwood trees in such plantations that were left to grow naturally and maintained along with the main crop (Figure 2). Trees in these areas receive no special treatment, other than regular nurture and checking. Whenever the main stem of the trees is found to contain resin, the owner of the land would have them harvested.

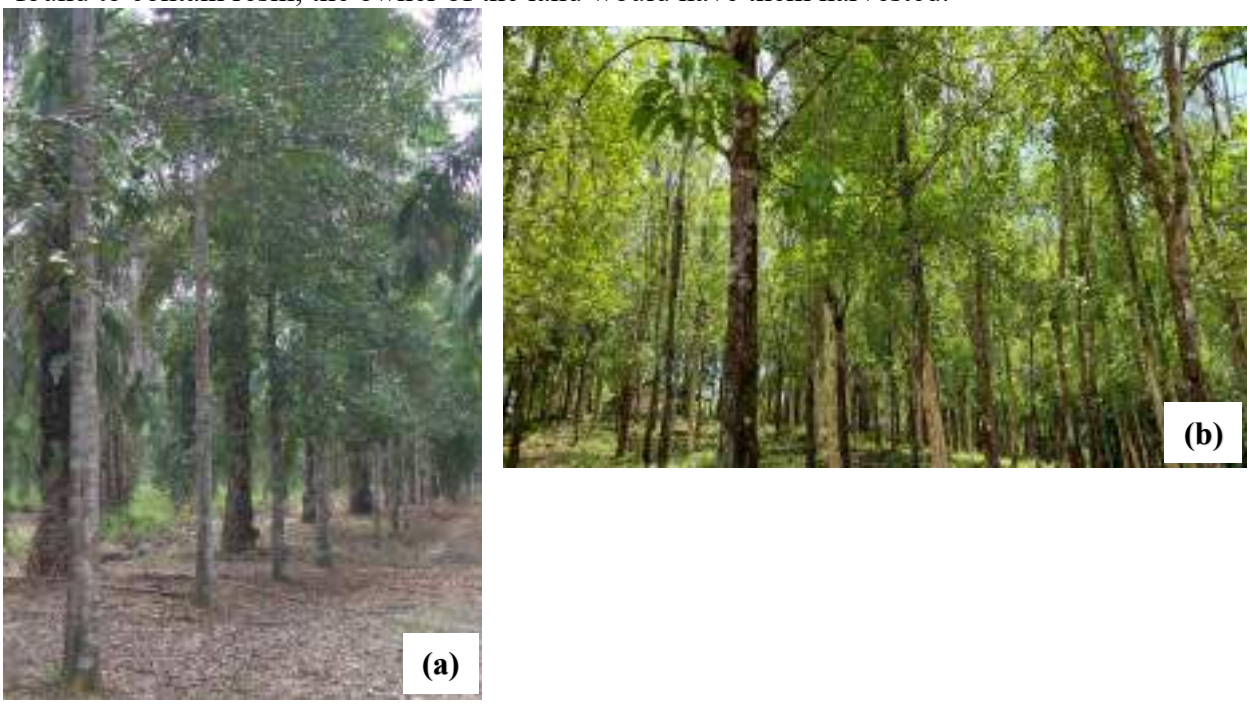

Figure 2. Agarwood "assisted production" (*A. malaccensis*) with palm oil in Bengkalis Regency, Riau Province (a) and agarwood partly "assisted production" and cultivated with rubber in Bengkulu Province (b).

Recently, most of the province in western part of Indonesia have agarwood plantation (Figure 3 & 4). Initially, the agarwood plantation started by the land/forest rehabilitation and reforestation program which used the abundant agarwood *A. malaccensis* seedlings. On the progress, Turjaman & Hidayat (2017) recorded that the agarwood plantation spread out in West Java, Central Java, East Java, Bali, Bangka Belitung, Riau, Aceh, West Sumatera, North Sumatera, West Kalimantan, Central Kalimantan, East Kalimantan, and South Kalimantan.

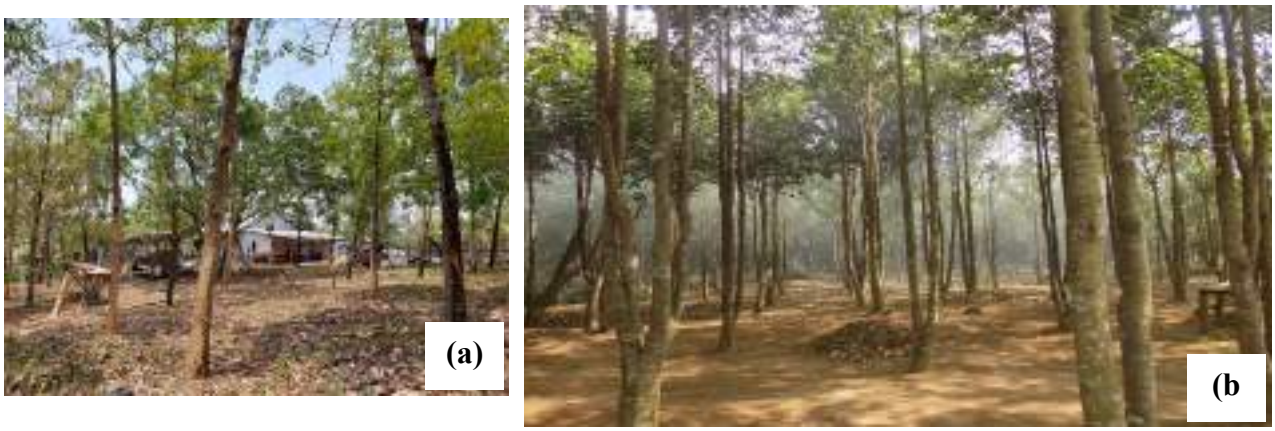

Figure 3. Agarwood *Aquilaria malaccensis* plantation in Bengkulu (a), Trubus Village, Central Bangka Regency, Bangka-Belitung (b) and in Langkat, North Sumatra (c)

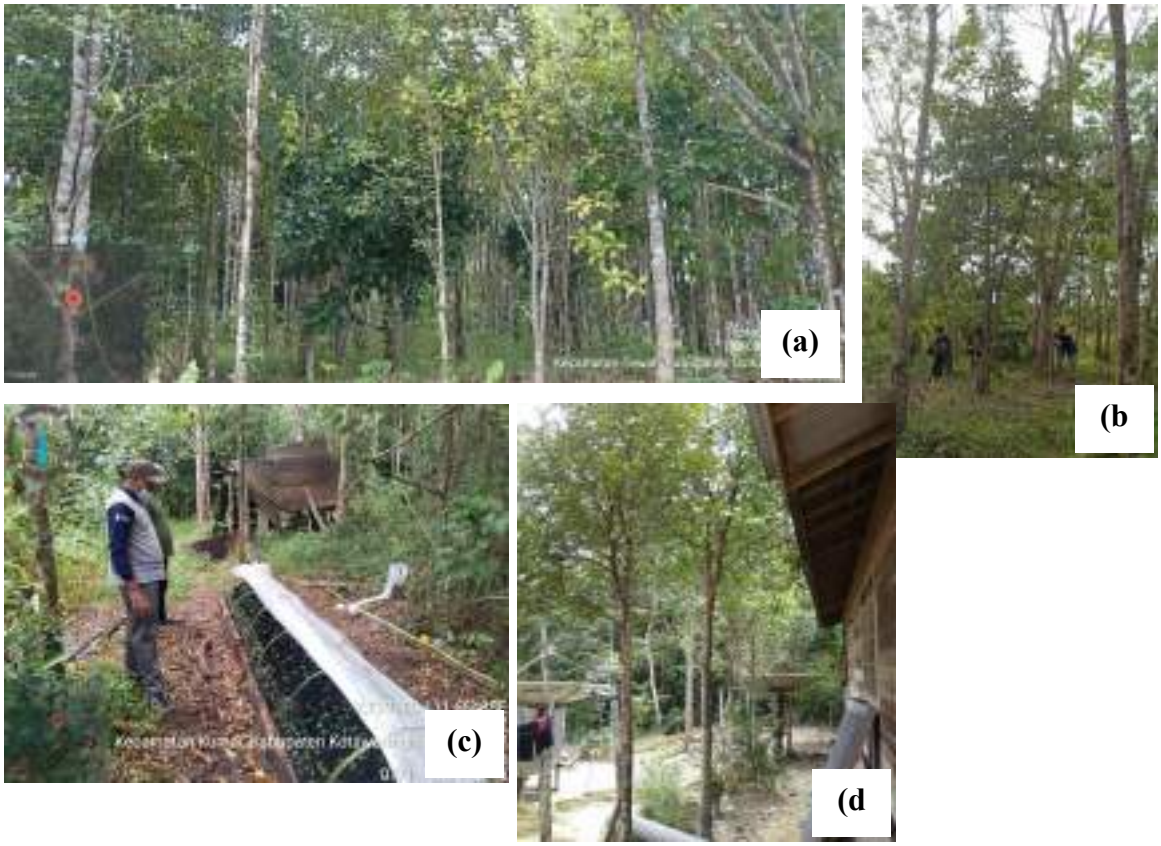

Figure 4. Agarwood *Aquilaria malaccensis* plantation in Central Kalimantan (a) & (b), nursery of agarwood in Central Kalimantan (c), agarwood planted closed to the house (d)

A species distribution model using maximum entropy algorithm found that the suitable habitat for *A. malaccensis* in Indonesia is around 26.45 million ha and moderately suitable around 30.48 million ha (In-prep, 2023). Based on the World Database on Protected Area, there is about 11.17 % of suitable habitat and 12.36 % of moderately suitable habitat that is found in conservation areas. The rest are found in non-conservation areas such as plantations,

agriculture, or even in settlements. The suitable areas have *acrisols*, *ferralsols*, *gleysols*, *histosols*, and *nitosols* types of soil. Based on this result, there are sufficiently large suitable areas available for developing new agarwood plantation in the country. Our calculation and mapping distribution of *A. malaccensis* using records from herbarium specimen shows that the Extend of Occurrence (EOO) are about 1,874,073.689 km^2 and Area of Occupancy (AOO) are around 364 km^2 (Figure 5)

Figure 5. The Extend of Occurrence (EOO) and Area of Occupancy (AOO) of *Aquilaria malaccensis*

2. Population size, status and trends of *Aquilaria malaccensis* in Indonesia

Based on researches in the last 15 years, the size of wild population of *A. malaccensis* in several areas in western part of Indonesia is ranged from 0.5 to 10 individuals per hectare. The research was conducted in state forest area, both in conservation area and non-conservation area. A population survey in Berau, East Kalimantan (Abdurrachman, et.al., 2009) showed that there are 29 trees in total area 48 ha or it had density approximately 0.61 ind/ha. The maximum diameter of the *A. malaccensis* tree was 44.7 cm while the minimum diameter was above 10.0 cm. The average of diameter increment was 0.40 cm (± 0.402 cm) per year. Meanwhile, the maximum growth was 0.64 cm per year for diameter class >40 cm. The other survey (Sumarna 2008) in Tabir Ulu District Forest, Merangin Regency, Jambi Province found there were seven trees per unit group of elevation distribution (<100 m, 200 m, >200 m) of *A. malaccenssis* and the population potency of seedling at nature average from each parental tree mean amount to 287 seedling (20.3 m^2 crown canopy). The survey in Rojolelo Forest Park, Bengkulu, Sumatra showed there were 11 trees of A. malaccensis which the diameter is up to 50 cm and 200 seedlings in each parental tree (Partomihardjo et. al, 2010). Furthermore Pribadi (2009) stated that in Kutai National Park there were 37 points of wild *A. malaccensis* in an area of 4,883.75 Ha. The number of mature stands is always less than younger stages, considering that this species needs shades at the seedling stage but requires sufficient sunlight as they grow taller.

Currently, most of the agarwood is harvested from areas owned by the community that are adjacent to the forest. Such population is left to grow naturally and harvested when it

contains resin with trees that have reached a minimum bole diameter of 20 cm. In the last 5 years, the "assisted production" population of *A. malaccensis* in Riau was recorded to have population density at most 8.13 individual/ha in Pericit Village and 0.58 individual/ha in Gosib, Siak Indrapura Regency. *A. malaccensis* was found in home gardens and plantations near the village (Yulizah et. al. 2022). People in these village obtain seedling from a mother tree in the nearby forest park. While, Setyawati (2010) reported that *A. malaccensis* stands in Central Lampung and West Lampung were found in cultivation areas where agarwood trees grow naturally on their land. In Bengkulu, Partomihardjo, et al. (2010) wrote there were 20 trees of *A. malaccensis* in farm garden in Bengkulu. A more recent survey (Yulizah et. al 2019), also recorded population densities in Bangka-Belitung region i.e., about 0.14 individuals/ha in Pelangas Village; 4.1 individuals/ha in Lubuk Pabrik Village, and 2.7 individuals/ha in Serdang Village. The "assisted production" agarwood which was found in these villages is associated with palm oil, rubber, pepper and other tree plantations located in production forest areas.

Since the 2000s, there have been some attempts of planting agarwood in Bangka Belitung up to three million stands (Yulizah et. al., 2019). Similar trials also developed in other islands in western part of Indonesia (Figure 3 & 4). Turjaman & Hidayat (2017) mentioned that the total population of planted agarwood in Indonesia is estimated to be about 3.4 million trees. Area with the highest number of estimated populations was Central Kalimantan (0.8 million trees), while the lowest was Jambi (818 trees). Sumatra and Kalimantan Island contribute more than 85% of agarwood plantations in Indonesia (Turjaman & Hidayat, 2017). Based on the registration data recorded by the Management Authority, there are 31 agarwood farmers with the total number of *A.malaccensis* stands was reaching 308,934 trees in a total area 245.94 hectares. It spreads out in Riau, South Sumatra, Bengkulu, Jambi, West Kalimantan and East Kalimantan. Not many owners of planted agarwood have registered their stands since such an administrative process is deemed to be tedious and time consuming. Most people would keep and nurse stands of agarwood that grow in their lands in the hope for future return. A summary of references about agarwood populations in several regions in Indonesia can be seen in Table 1.

Table 1. The Population Size, Habitat and Agarwood Type in Indonesia

No	Location	Density (ind/Ha)	Land Status	CITES Source Code	Reference
1	Tabir Ulu District Forest, Merangin Regency, Jambi Province	7 trees per unit group of elevation distribution (<100 m, 200 m, >200 m) and 287 seedlings around the parental tree	State forest	Wild (W)	Sumarna (2008)
2	STREK (Silviculture Technique for Regeneration of Logged	0.61 ind/ha	State forest	Wild (W)	Abdurachman, et al. (2009)

	Over Area in East Kalimantan) Labanan Research Plot, Berau, East Kalimantan,				
3	Kutai National Park	0,01 ind/ha	State forest (conservation area)	Wild (W)	Pribadi (2009)
4	PLG Bengkulu	10 ind/ha	State forest	Wild (W)	Partomihardjo et. al (2010)
5	Bengkulu Tengah Regency	20 individuals	Farm garden	Assisted production (Y)	Partomihardjo et. al (2010)
6	Tahura (Forest Park) Rojolelo, Bengkulu	11 ind/ha & 200 seedlings in each parental tree	State forest (conservation area)	Wild (W)	Partomihardjo et. al (2010)
7	Way Waya, Sendang Baru Village, Sendang Agung District, Gunung Sugih Regency, Lampung Province	10 ind/ha	Cultivation area	Assisted production (Y)	Setyawati (2010)
8	Mount Maras National Park	0.8 ind/ha	State forest (conservation area)	Wild (W)	Yulizah et.al (2019)
9	Perincit Village, Pusako District, Siak Indrapura Regency, Riau Province	8.13 ind/ha	Home garden	Assisted production (Y)	Yulizah et. al. (2022)
10	Gosib Village, Siak Indrapura Regency, Riau Province	0.58 ind/ha	Home garden	Assisted production (Y)	Yulizah et. al. (2022)
11	Pelangas Village, Simpang Teritip District, Bangka Barat Regency, Bangka-Belitong Province	0.14 ind/ha	Home garden	Assisted production (Y)	Yulizah et.al (2019)
12	Lubuk Pabrik Village, Lubuk Besar District, Bangka Tengah Regency, Bangka-Belitong Province	4.1 ind/ha	Home garden	Assisted production (Y)	Yulizah et.al (2019)

13	Serdang Village, Toboali District, Bangka Selatan Regency, Bangka-Belitong Province	2.7 ind/ha	Home garden	Assisted production (Y)	Yulizah et.al (2019)
14	Tanjung Terdana Village, Pondok Kubang Ditrict, Bengkulu Tengah Regency, Bengkulu Province	100 ind/ha	Private land	Assisted production (Y)	Field inventory (2023)
15	Padang Ulak Tanjung Village, Talang Empat District, Bengkulu Tengah Regency, Bengkulu Province	663 ind/ha	Private land	Plantation A)	Field inventory (2023)
16	Unit 1 Tambak Rejo Village, Padang Jaya District, Bengkulu Utara Regency, Bengkulu Province	1000 ind/ha	Private land	Plantation (A)	Field inventory (2023)
17	West Kotawaringan District, Central Kalimantan	400 ind/5ha	Private land	Plantation (A)	BKSDA (2017)-unpublished data
18	South Barito District, Central Kalimantan	237 ind/23ha, tree with diameter > 20 cm	Private land	Plantation (A)	BKSDA (2017)-unpublished data
19	Gunung Mas District, Central Kalimantan	200 ind with mean diameter 10-20 cm	Private land	Plantation (A)	BKSDA (2023)-unpublished data
20	Gunung Mas District, Central Kalimantan	300 ind/ha consist of: 200 ind with mean diameter 5-10 cm	Private land	Plantation (A)	BKSDA (2023)-unpublished data

		100 ind with mean diameter 15-18 cm			
21	Gunung Mas District, Central Kalimantan	200 ind with mean diameter 10-15 cm	Private land	Plantation (A)	BKSDA (2023)-unpublished data
22	Gunung Mas District, Central Kalimantan	1500 ind/ha with mean diameter 12-22 cm	Private land	Plantation (A)	BKSDA (2023)-unpublished data
23	Bi`ih Village, Karang Intan Subdistrict, Banjar District, South Kalimantan	4000 ind/4.5 ha	Private land	Plantation (A)	BKSDA (2023)-unpublished data
24	Takuti Village, Karang Intan Subdistrict, Mataraman District, South Kalimantan	3000 ind/3 ha	Private land	Plantation (A)	BKSDA (2023)-unpublished data

3. Threats to these species (and any measures in place to reduce these threats)

The major threats to *Aquilaria malaccensis* are as follows:

a. There are non-official reports of Illegal harvest from the community that live around the forest area. However, its trends have been declining due to the lower return and higher uncertainties of product availability compared to capital invested. On the other hand, forest rangers are increasing their patrols where the species occurred and monitors product distribution.
b. Lowland forested areas where the species were naturally distributed were converted to mining concessions, palm oil plantations, farms, and settlements.
c. Fungal and pest attacks, (esp *Heortia vitessoides*) were observed in several nurseries which were dedicated for replanting and farming areas. However, studies have shown that certain practices have effectively managed these threats.

These major threats were considerably managed due to great exposure on the species' products. Authorities have been promoting and supporting the species cultivation in various types of land use over the last decade. Local authorities have developed several Forest Management Unit (FMU/KPH) to reinforce agarwood production with mixed planting strategy in palm plantation, community's forest and farms.

4. Details on how the species are used; is there a domestic as well as international market? If so, what products are traded domestically, and are any data available regarding domestic trade volumes?

Products of agarwood *A. malaccensis* that are traded across the border, predominantly in the form of chips, some portion of powder, oil, decorative carving and finished products such as incense (Figure 6). The export destination countries are Saudi Arabia, Singapore, Taiwan, United Arab Emirate, Yemen, Kuwait, Republic of Korea, India, Hongkong, Bahrain, Qatar and China. These end products are similar in shape between species. However, the identification to the species level can be trace from the transport documents, particularly for specimens from the wild, registered hunters would be required to describe their finding to their collector/dealer who must include such information in the permit submission. The most workable identification is at the beginning of harvest. Species of standing stock are distinguishable morphologically from their flower, fruit, leaf and wood fiber. Many people in villages plant *A. malaccencis* as this species has the most abundant seedling and is more preferred in the market.

Figure 6. Agarwood products chips (a), non-exhausted powder (b), decorative log (c), oil (d), exhausted powder (e).

There is a small number of agarwood *A. malaccensis* products which domestically marketed in specified community. For example, there are some small shops in Middle East community which provide the agarwood products like powders, oil and derivatives for aromatic essences.

5. Regulation and management measures in place for wild and/or assisted production/plantation-grown agarwood trade (e.g. legal harvest quotas, export quotas, if trade is managed at species or at genus level), including details of any specific production systems in operation, and/or any registration systems in place for agarwood- producing trees. We would be grateful if you could provide copies of any relevant legislation.

National regulation for utilization of wild plants and animals is mostly contained in the Minister of Environment and Forestry (MoEF) regulation as this ministry is assigned to coordinate CITES implementation and govern Appendix II species management. Those regulations are as follow:

1. Law No. 5/1990 on Conservation of Biotic Natural Resources and Ecosystems
2. Government Regulation No. 7/1999 on the Preserving Plant and Animal Species.
3. Government Regulation No. 8/1999 on the Use of Wild Plant and Animal Species.
4. Minister of Forestry Decree No. 447/Kpts-II/2003 on Administration Directive of Harvest or Capture and Distribution of the Specimens of Wild Plant and Animal Species.
5. Minister of Environment and Forestry Regulation No. P.106/ MENLHK/SETJEN/KUM.1/12/2018 on the Second Amendment to the Minister of Environment and Forestry Regulation No. P.20/ MENLHK/SETJEN/KUM.1/6/2018 on Protected Plants and Animals.
6. Directorate General of Forest Protection and Nature Conservation Regulation No. P.25/IV-SET/ 2014 on Administration of Agarwood Plantation Registration
7. Minister of Trade Regulation No.18 Year of 2021 Jo Minister of Trade Regulation 40 Year of 2022 on Export Prohibited Goods and Import Prohibited Goods
8. Minister of Trade Regulation No.19 Year of 2021 Jo Minister of Trade Regulation No.12 Year of 2022 on Export Policy and Regulation
9. Minister of Finance Decree No. 1821/KM.4/2019 on List of Restricted Goods for Export Based on the Minister of Trade Regulation No. 122 of 2018

Species management of *A. malaccensis* exported with source code W is implemented by imposing an annual quota. The quota is set based on available information on population, distribution, level of trade activities per province, indicated by previous years used quota and proposed quota for the following years. The mechanism of setting quota is outlined in Figure 7.

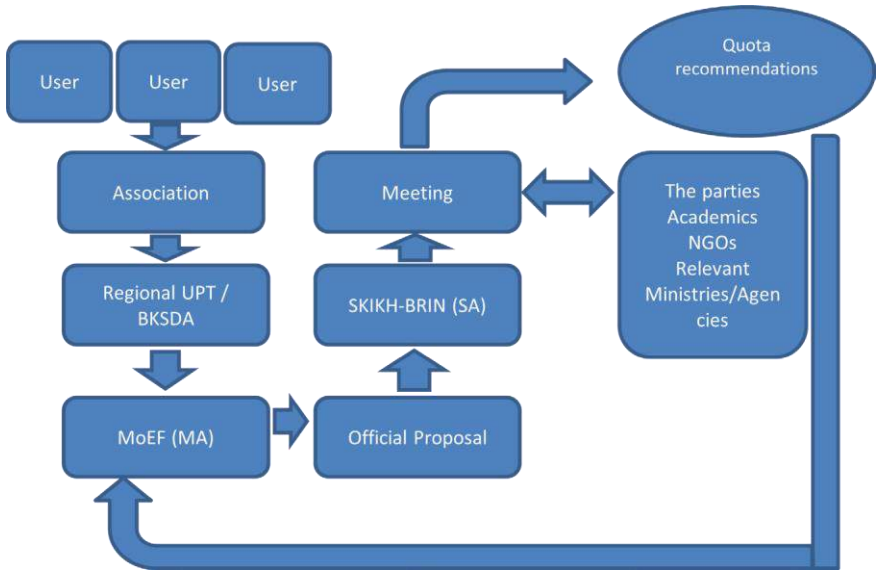

Figure 7. The Proposed harvested Quota of Wild Plant and Animal Species Flowchart

The quota is distributed to domestic permit holders who operate in specific harvest areas. Permit holders usually employ several registered agarwood hunters. These hunters are varied in skill, and can be categorized as forest and non-forest hunter. Those who operate in non-forest areas would differentiate between registered and non-registered plantations.

Based on Government Regulation No. 7/1999 on the Preserving Plant and Animal Species dan Minister of Environment and Forestry Regulation No. P.106/ MENLHK/SETJEN/KUM.1/12/2018 on the Second Amendment to the Minister of Environment and Forestry Regulation No. P.20/ MENLHK/SETJEN/KUM.1/6/2018 on Protected Plants and Animals, agarwood species is not listed as a protected species. However, its utilization is regulated by Government Regulation No. 8/1999 on the Use of Wild Plant and Animal Species dan Minister of Forestry Decree No. 447/Kpts-II/2003 on Administration Directive of Harvest or Capture and Distribution of the Specimens of Wild Plant and Animal Species.

Following the aforementioned regulation, distribution of specimens of Appendix II species must be managed with a controlled extraction from the wild and a set of documentation (Figure 8). The annual national quota is set for each province by the management authority based on recommendation from the scientific authority. Figure 8 shows that those who gather agarwood are required to have a harvest/capture permit. Business actors carrying out domestic and foreign distribution are required to have a distribution permit. Such actors would have several registered gatherers. Since the annual quota is distributed to these workers, permit holders must report their activities to the government. Every transported specimen or product of appendix II species must be accompanied by a domestic transport document (SATS-DN) issued by the provincial unit of Ministry of Forestry (BKSDA), and a cross-border transport (SATS LN) or CITES permit issued by the Directorate General (DG) of Forest Protection and Nature Conservation, or (following nomenclatural changes) DG of Nature Resource and Ecosystem Conservation, in the event of export. Only permit holders who may apply such documentation (Figure 8).

In the case of agarwood from plantation, agarwood harvested from such areas will not be limited by an amount of quota. As long as the specimens are confirmed and verified by the field officer to have originated from that mentioned plantation, they may transport as much as the plantation could produce. However, those plantations must be registered and documented before harvesting, with a set of standard information as regulated in Directorate General of Forest Protection and Nature Conservation Regulation No. P.25/IV-SET/ 2014 on Administration of Agarwood Plantation Registration. Such documentation is deemed exhaustive by the locals, especially those in areas away from the provincial capital, which makes the progress of registration rather slow (Figure 8).

The administration of export requires further verification of other documents, i.e., phytosanitary certificates, export approvals from the Ministry of Trade and export/import notifications from the customs office. The process of document verification could be monitored by a website application called Indonesia National Single Window (INSW). The INSW is a single window service operated by an institution under the Ministry of Finance, to handle related export-import and/or national logistics documents electronically, which includes customs documents, quarantine documents, licensing, port/airport documents, etc. Whenever a documentation fails in the system, the process of permitting will not be continued.

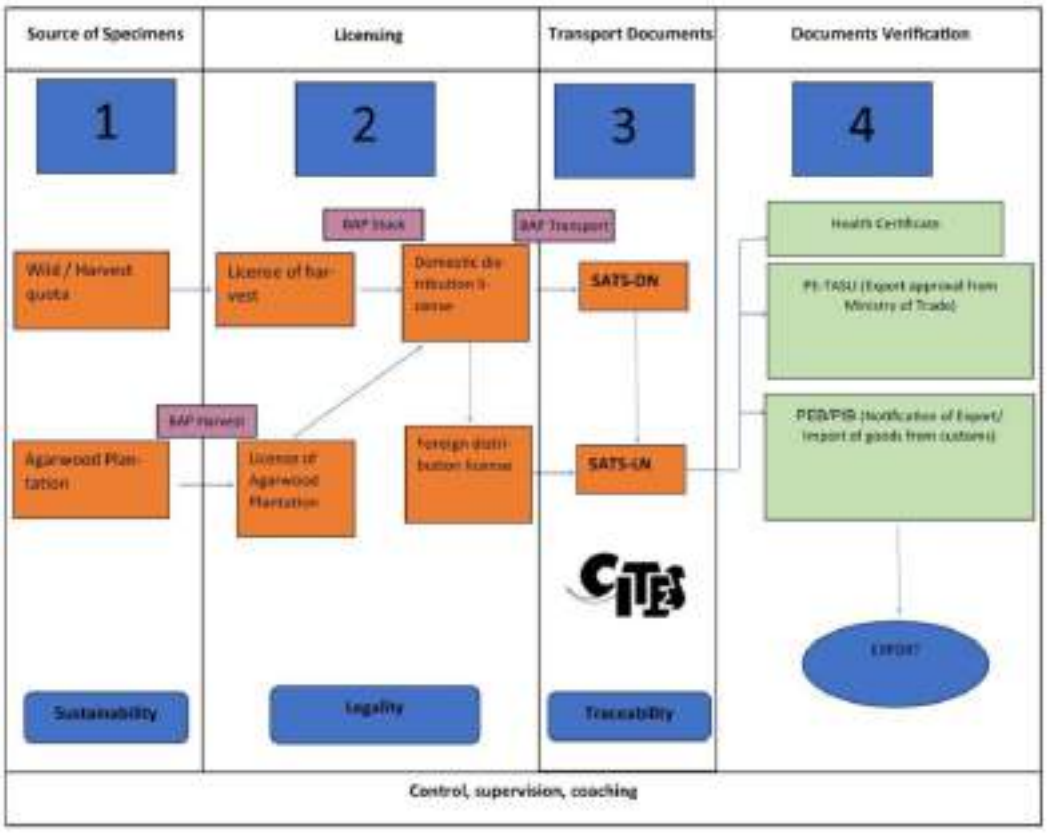

Figure 8. The management procedure under the national regulation.

6. **Population size and structure within harvest locations, including whether any inventories or monitoring of the species has taken/takes place. If so, please provide full details, e.g.: concession, plantation, area, number of individuals inventoried, results of population structure including number of individuals in each diameter size class. If inventories have not taken place, are there any plans to undertake them?**

Harvest quotas for agarwood are set for individual provinces based on available information on standing stock of all types of population, harvest location distribution, permit-holder performance in trading (shown by how their shared quota is taken up) and subsequent proposal. The information is obtained from the local authority (BKSDA) reports and findings, published scientific articles and other field works researches. The data are used to confirm that the agarwood is originate from the non-conservation area and does not threaten the population in the wild.

Quota for *A. malaccensis* in the last five years are set to continuously be lower in the following years, in order to stimulate workers to register standing stock in their plantation or farmland. In addition, Indonesia has a commitment to decrease the quota of wild *A. malaccensis* agarwood in the level of **40%** in 2024. National regulation requires that specimens declared as "non-wild harvest" must be verified and only be taken from registered plantations/farmland. Many people that own planted agarwood, especially those with a small number of trees, hold back to register as they consider the administration is exhausting. Such assumptions lead to alternative distribution of specimens through the established management that is controlled by means of quota. With current productivity, this quota is mostly taken up.

For the agarwood from plantation or "assisted production" area, the farmer makes some physical treatment to the stem i.e., injection, peeling the bark, nailing, etc., and applies chemical substance, or inoculation material composed of Fusarium fungi, or even just agarwood resin from other trees. These treatments are expected to drive the resin formation in the heartwood.

A survey for agarwood harvesting with the "assisted production" and plantation type were conducted recently in Bengkulu, Sumatra. The "assisted production" agarwood measurement was held in Tanjung Terdana Village, Pondok Kubang District, Bengkulu Tengah Regency, Bengkulu Province (Figure 9). The land is owned by CV Usaha Tani Mandiri with total area 1 Ha. There are 100 trees of *A. malaccensis* with diameter range 25.7 – 58.9 cm and height ±15 m. These trees are grown naturally associated with Cempedak (*Artocarpus* sp.), Jambu-jambuan (*Syzygium* sp.) Taping (*Archidendron* sp.). anggrung (*Trema orientalis*), etc. The owner was tried to inoculate the tree by cutting or injuring the agarwood stem in depth of 1 to 3 cm (Figure 9). From the sampling plot sized 400 m^2, there are 6 agarwood trees which the diameter range in 6,5 cm – 58,9 cm. Although they grow in a private land and received non-intensive treatment, the stands and their seedlings are growing well, shown by the existence of smaller trees (Figure 10). For the seedling, it can only be found in small number (4 seedlings in 1 m^2 sampling plot) since the seeds are collected by the farmers as the source of plantation.

Figure 9. The Inoculation Process by Injuring the Stem of *A. malaccensis* in Tanjung Terdana Village, Pondok Kubang Ditrict, Bengkulu Tengah Regency, Bengkulu Province

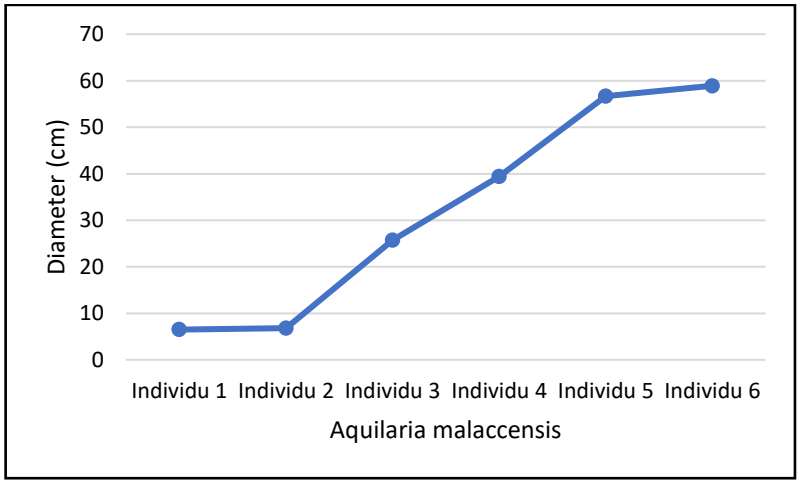

Figure 10. Diameter Class Distribution of "Assisted Production" *A. malaccensis* in 400 m^2 Sampling Plot Area

The agarwood plantation is managed by the farmers which coordinated by a private business for providing the inoculation formula. There are two types of plantations, e.g., mix plantation with rubber and monoculture system. In with the mix planting area, the agarwood trees are planted intermittently with the rubber (Figure 11). The plant spacing of agarwood and rubber is 2.5 m x 3 m that make the density of agarwood stands are about 663 individual/Ha. In the age of 12 years, the agarwood owner would peel the bark and smearing it with inoculation formula to stimulate the resin formation in the stem (Figure 12). The average diameter of agarwood is about 17 cm and eight m height. The peeled stems are left for eight months and harvested afterwards. The bark peeling is repeated following a harvest. With this process, a tree can produce five kg of agarwood in dry weight. During in its life cycle, the agarwood can be peeled 7-8 times. Therefore, the estimation of agarwood production in this area is about 26,520 kg/ha.

Figure 11.The Mix Plantation of Agarwood and Rubber In Padang Ulak Tanjung Village, Talang Empat District, Bengkulu Tengah Regency, Bengkulu Province

Figure 12. Bark Peeling Method of Agarwood Inoculation in Bengkulu Tengah Regency

In Bengkulu Tengah and Bengkulu Utara Regency, it was found a monoculture plant of agarwood (Figure 13). The plant spacing of plantation in Bengkulu Tengah is 4 m x 4 m. In the age of 12 years old, the average diameter are about 18 cm and height 10 m. With the same of bark peeling method, it is estimated that the production of agarwood would reach 25.000 kg/ha. Not all agarwood stands in the monoculture plantations in Bengkulu Utara are inoculated and harvested. The plantations apply different stand spacing, planted seedlings at different ages and gives different treatments. The farmers would prefer their own techniques to achieve acceptable production. Therefore, the diameter class distribution of agarwood in such area is varied (Figure 14).

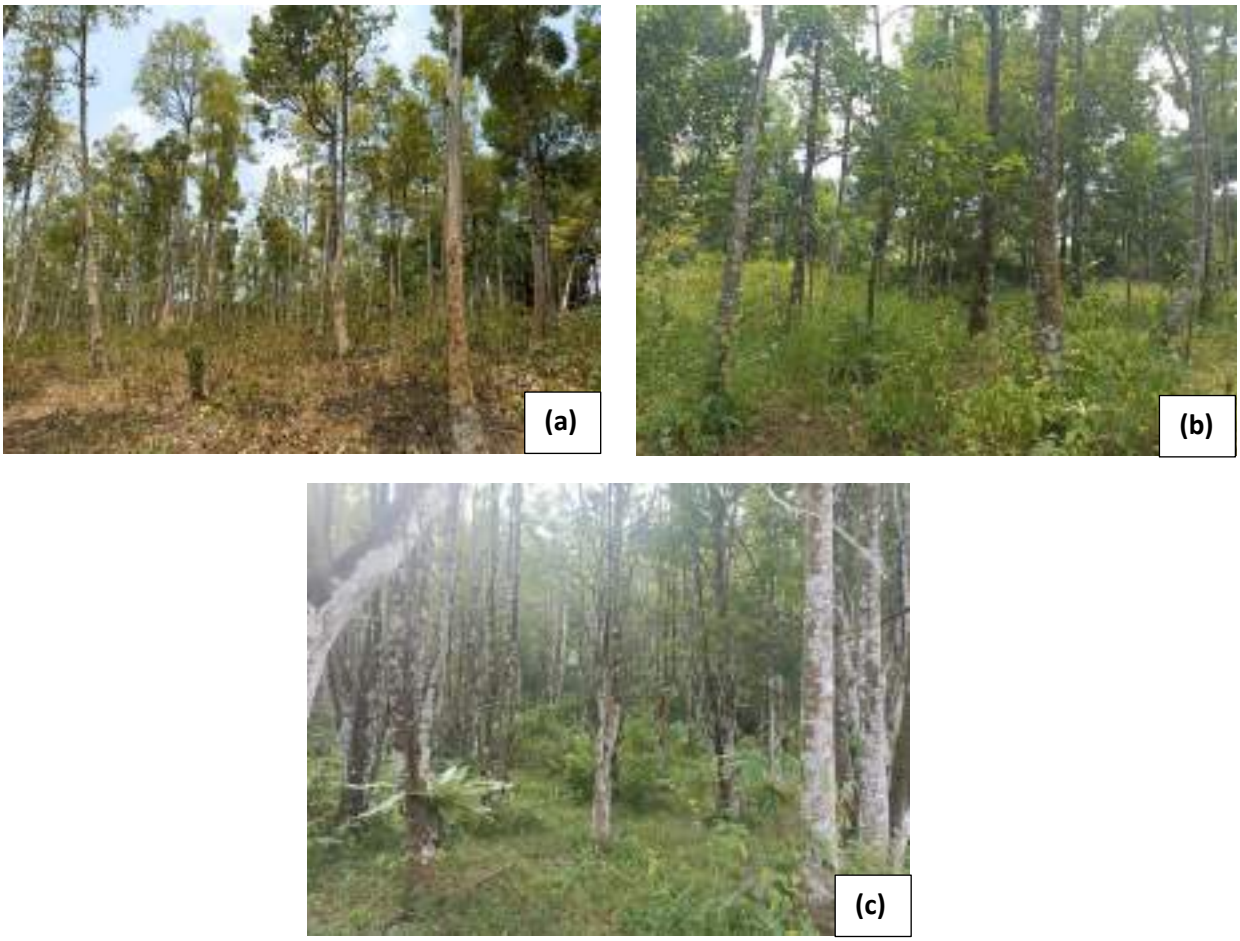

Figure 13. The Monoculture Agarwood Plantation in Padang Ulak Tanjung Village, Talang Empat District, Bengkulu Tengah Regency(a), Gardu Village, Arma Jaya District, Bengkulu Utara Regency (b) and Unit I Tambak Rejo Village, Padang Jaya District, Bengkulu Utara Regency

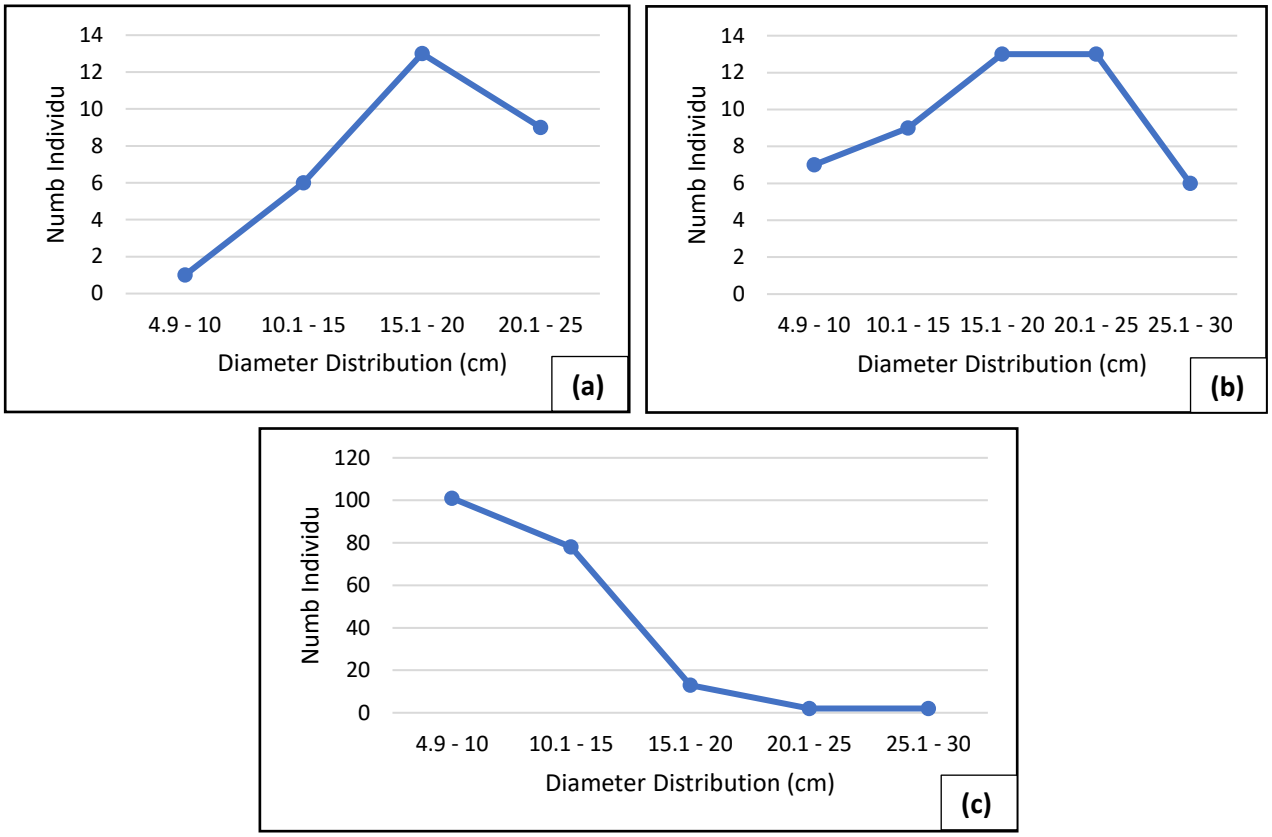

Figure 14. Diameter Class Distribution Agarwood Plantation in 400 m^2: plant spacing 4 m x 4 and age 12 years (a), plant spacing 3 m x 3 m and age 14 years (b), plant spacing 1 m x 1 m and age 15 years (c)

In 2023, the inventory has been established in Gunung Mas District, Central Kalimantan (Tabel 1) (Figure 4). In this area, agarwood was planted mixed with rubber or backyard trees such as jack fruit (*Arthocarpus* spp.), durio (*Durio* sp.), rambutan (*Nephelium lappaceum*) and etc. Furthermore, the inventories in the other locations will be conducted in the following years.

7. Details of how CITES non-detriment findings are made, including the institutions involved in the process. We would be grateful if you could provide copies of any new or revised non-detriment findings.

The Scientific Authority (SA) establishes teams for evaluating trade of plant species, consisting of personnels from different research centers in the National Research and Innovation Agency (Indonesian: Badan Riset dan Inovasi Nasional-BRIN) and some personnels from the Management Authority (MA) of the Ministry of Environment and Forestry. The team gathers information from various sources, verified their validity at its best, based on scientific principles, and categorized their degree of reliability. Verification is carried

out through discussions and visits to points of production, and documentation. Information and results of studies are often obtained sequentially, in accordance with the process and dynamics of trading activities.

The Management Authority (MA) and their field officers are SA's principal teammates in compiling the data, and prepare the assessment and reports. They are maintaining historical records of trade licensing and corresponding activities. Another contributor who also plays the role in acquiring relevant data and information is the trader association. They hold documentation of their members' activities and often facilitate visit to processing sites. Other researchers from BRIN and universities are also involved in field studies on different aspects.

The SA and MA evaluate the imposed annual quota for appendix II species by conducting several meetings and data gathering, starting in the eighth and ninth months of each year. The latest quota and the number of products used were obtained from the records of permit letters that have been granted become the starting point to set the annual quota. Whenever necessary, extra field inspection would be suggested by the SA to the field officers whose results will be reported as additional data/information to be discussed in the final meeting. The evaluation result will become the bases for the quota setting for the following years.

8. We also note that Indonesia has published quotas for *A. malaccensis* 2013-2023, please could you confirm whether these quotas apply to the species/genus in general, or whether they were established for specific part(s) or derivative(s) (i.e. chips, powder, oil, logs, timber, etc)?

Based on the published quota in 2013-2023, it can be explained that it applied to the species of *Aquilaria malaccensis* for all kinds of products.

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Response to request for information on *Gyrinops* spp. in Indonesia

1. **Distribution *Gyrinops* spp. in Indonesia, including extent of occurrence and area of occupancy in forests, plantations and protected areas (for *Gyrinops* spp., please provide species-level information if available)**

Gyrinops spp. (decaying logs) founds in lowland fresh water swamp and distributed in Asmat and Mappi Regency in the southern part of Papua Province (Figure 1). Based on a record from the Nature Conservation Office in Papua (2017), there are 814,436.86 of swamp in Asmat and Mappi ha (14% from total areas of two regions) that assumed to contain decaying logs, distributed in 22 districts. There is no available information regarding the species as yet, and the species-level identification needs to be resolved.

Figure 1. Distribution of decaying wood (*Gyrinops* spp.)

2. **Population size, status and trends of *Gyrinops* spp. in Indonesia (for *Gyrinops* spp., please provide species-level information if available)**

Specimens in the trade under the name *Gyrinops* spp. are derived from the sunken-wood known as decaying log. There is no known trade using the term “decaying log” that is taken from living stands. Decaying log (*Gyrinops* spp.) is derived from dead wood harvested in the lowland freshwater swamp in Asmat and Mappi Regency (Figure 2). Alhamd & Rahajoe (2018) reported that the decaying logs currently traded are known to originate from Asmat and Mappi Regency. The term “decaying logs” refers to large pieces

of logs and roots with a diameter about 50 cm sunken in the swamp area. The swamps are relatively an open area, located in the local's backyard and the areas within a walking distance from the village. The survey was conducted by observing the locals' people when excavating the logs and recording tree species naturally growing around the area.

Figure 2. Decaying logs from in Asgon Mappi Regency, Papua.

The area was once an active forest concession operated during the 80s up to 90s and has been abandoned since then. There are logs of deemed non-valuable wood, sank in the mud which later were found to contain aromatic substances and labelled by the locals as decaying logs. There was agarwood hunting in Papua in 1995 that wood with low to no-resin content wood were left in the mud (Pers. comm). These sunken-woods then were excavated in 2000 and was then considered valuable wood. Following the finding, extracting decaying logs became the local's main livelihood in Asmat Regency (Soehartono & Newton, 2002) and is continuing until today. Such livelihood is now also found in Mappi Regency. Extraction of these decaying logs is controlled by setting up the annual quota for the last four years.

Research has been carried out in 2018 to identify chips to species level using DNA (unpublished data). Due to technical difficulties in obtaining good-quality DNA from the decayed samples, molecular identification can be assigned only to the genus level. Our preliminary results based on trnLF indicated that the wood samples extracted from the mud are similar to *Gyrinops versteegii* or *G. decipiens.* Currently, we continue to work on identifying the wood by adding more samples and applying different techniques. As no correct identification is known yet for the wood, we treat them at the genus level.

3. Threats to these species (and any measures in place to reduce these threats).

There are no significant threats to decaying logs as it is a non-living material (dead wood). The extraction and excavation activities do not resulted in disturbing the forest as the swamps are located in open areas.

4. Details on how the species are used; is there a domestic as well as international market? If so, what products are traded domestically, and are any data available regarding domestic trade volumes?

The decaying logs are traded domestically as logs, chips, powder, and resin. The domestic trade of decaying wood is regulated through harvest quotas. The harvest quota is distributed to domestic permit holders who operate in specific areas. Permit holders employ locals who search and extract decaying logs from the mud. They usually establish

a point of collection that also serves as a drying and initial sorting facility in the nearby area. Such facilities and the workers involved are registered and might be inspected by field officers in the provincial unit at any time. The permit holder is the one who handles the administrative submission for transporting agarwood. Every consignment from the source location to another point of transport must be accompanied by an appropriate transport permit (SATS-DN), which states the type and amount of the package, unit, date and locations of transport. This transport permit must be based on minutes of inspection (BAP) issued by authorized officers, which verify the actual physical consignment to be transported as declared by permit holders. Both documents must be produced at every point of transport, and any changes to the consignment must be declared, which includes the transformation of raw materials into products. The product might be wood chips of varying qualities, oil, powder, decorative carvings and various incense shapes. The domestic transport document (SATS-DN) was issued by the provincial unit of the Ministry of Forestry (BKSDA).

Figure 3. The product of decaying wood (*Gyrinops* spp.)

5. **Regulation and management measures in place for wild and/or assisted production/plantation-grown agarwood trade (e.g. legal harvest quotas, export quotas, if trade is managed at species or at genus level), including details of any specific production systems in operation, and/or any registration systems in place**

for agarwood- producing trees. We would be grateful if you could provide copies of any relevant legislation.

National regulation for the utilization of wild plants and animals is mostly contained in the Minister of Environment and Forestry (MoEF) regulation as this ministry is assigned to coordinate CITES implementation and govern Appendix II species management. Those regulations are as follows:

1. Law No. 5/1990 on Conservation of Biotic Natural Resources and Ecosystems
2. Government Regulation No. 7/1999 on the Preserving Plant and Animal Species.
3. Government Regulation No. 8/1999 on the Use of Wild Plant and Animal Species.
4. Minister of Forestry Decree No. 447/Kpts-II/2003 on Administration Directive of Harvest or Capture and Distribution of the Specimens of Wild Plant and Animal Species.
5. Minister of Environment and Forestry Regulation No. P.106/ MENLHK/SETJEN/KUM.1/12/2018 on the Second Amendment to the Minister of Environment and Forestry Regulation No. P.20/ MENLHK/SETJEN/KUM.1/6/2018 on Protected Plants and Animals.
6. Directorate General of Forest Protection and Nature Conservation Regulation No. P.25/IV-SET/ 2014 on Administration of Agarwood Plantation Registration
7. Minister of Trade Regulation No.18 Year of 2021 Jo Minister of Trade Regulation 40 Year of 2022 on Export Prohibited Goods and Import Prohibited Goods
8. Minister of Trade Regulation No.19 Year of 2021 Jo Minister of Trade Regulation No.12 Year of 2022 on Export Policy and Regulation
9. Minister of Finance Decree No. 1821/KM.4/2019 on List of Restricted Goods for Export Based on the Minister of Trade Regulation No. 122 of 2018

Following the Indonesia regulation (Minister of Forestry Decree No. 447/Kpts-II/2003 on Administration Directive of Harvest or Capture and Distribution of the Specimens of Wild Plant and Animal Species), The annual national (harvest and export) quota is set for each province by the management authority based on recommendation from the scientific authority. The quota is set based on the estimation of potential yield from the total area of known swamps that contain decaying logs in Mappi and Asmat. The mechanism of setting quota is outlined in Figure 4.

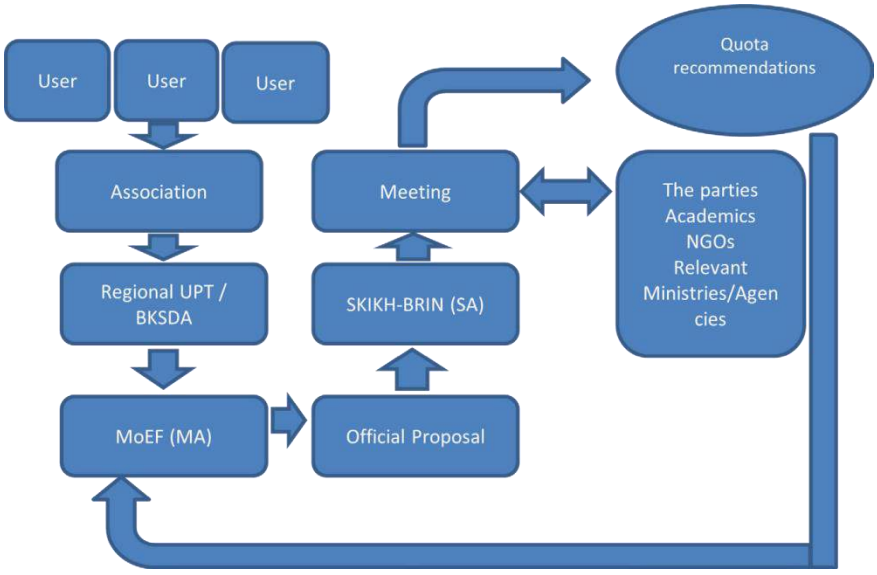


Figure 4. The Proposed harvested quota of wild plant and animal species flowchart

The quota is distributed to domestic permit holders who operate in specific areas. In the case of decaying logs, workers (who extract the logs from the mud) operate in a group that is affiliated to a permit holder. This permit holder has a point of collection that also serves as an initial process facility such as sorting and drying. Field officer has the details of such a facility and might inspect the stock and ongoing activities apart from the scheduled verification for transport permission. Permit holders are also required to promote plantations in their operating area with seedling obtained from the nearby standing stock. Since the annual quota is distributed to these workers, permit holders must report their activities to the government.

The permit holder is the one who handles the administrative submission for transporting agarwood. Every consignment from the source location to another point of transport and so forth, must be accompanied by an appropriate transport permit (SATS-DN) which states the type and amount of the package, date and locations of transport. This transport permit must be based on minutes of inspection (BAP) issued by authorized officers which verified the actual physical consignment to be transported as declared by permit holders. Both documents must be produced at every point of transport and any changes to the consignment must be declared, which includes the transformation of raw material to products. The product might be in the form of wood chips of varying qualities, oil, powder, decorative carvings and various shapes of incense. A domestic permit holder might also be an export permit holder. An export permit (SATS-LN) or CITES permit can only be granted based on a correct domestic transport permit (SATS-DN) and correct minutes of inspection (BAP). These transport documents also become the tool for local authorities (BKSDA) to monitor the utilization of quota and evaluate performance of a permit holder. The CITES permit became a required document in the export-import single window system established by the government. Regular inspection and monitoring of activities in the point of collection as well as in product processing sites become the main tools in controlling the distribution of decaying logs. The resulting reports determine whether a quota should be lower in the following years, or extraction is temporarily or permanently stopped or re-continued. The complete procedure is illustrated in Figure 5.

The administration of export requires further verification of other documents, i.e., phytosanitary certificates, export approvals from the Ministry of Trade and export/import notifications from the customs office. The process of document verification could be monitored by a website application called Indonesia National Single Window (INSW). The INSW is a single window service operated by an institution under the Ministry of Finance, to handle related export-import and/or national logistics documents electronically, which includes customs documents, quarantine documents, licensing, port/airport documents, etc. Whenever a documentation fails in the system, the process of permitting will not be continued.

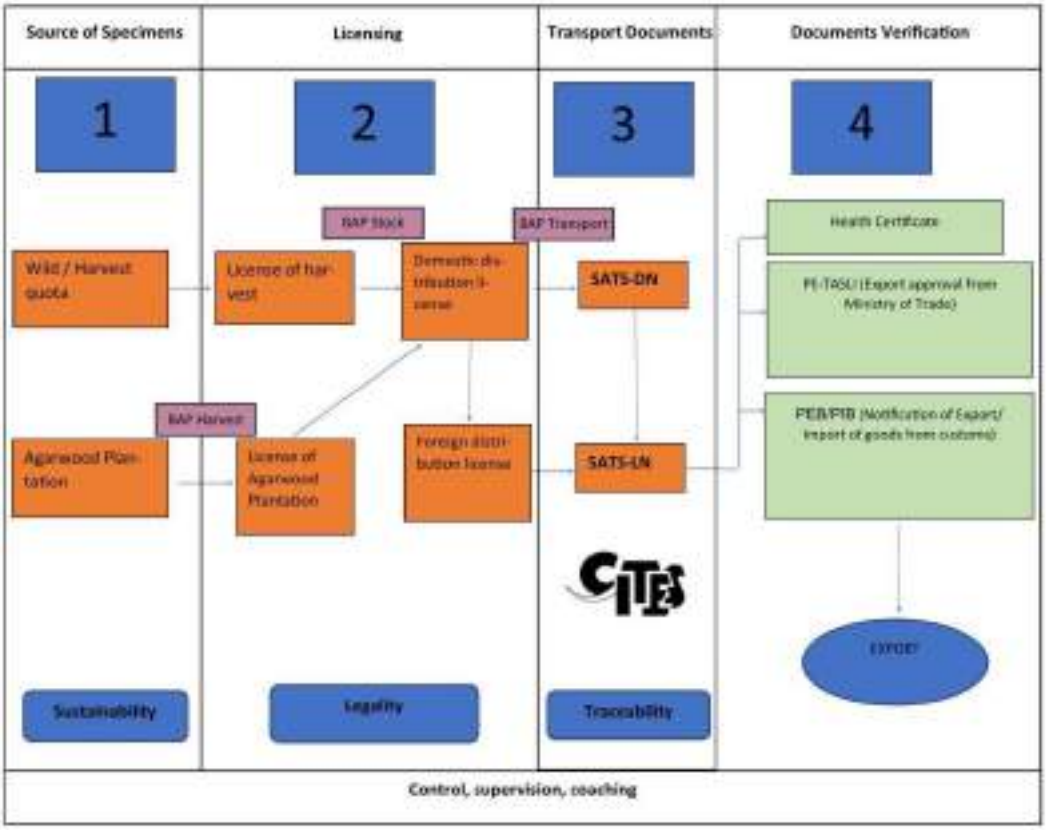


Figure 5. The management procedure under the nasional regulations.

6. **Population size and structure within harvest locations, including whether any inventories or monitoring of the species has taken/takes place. If so, please provide full details, e.g.: concession, plantation, area, number of individuals inventoried, results of population structure including number of individuals in each diameter size class. If inventories have not taken place, are there any plans to undertake them?**

Some surveys had been done in 2018 with 20 observation plots in Mappi and Asmat Regency. The inventories result estimated that there are 119,600 tons decaying wood contained in 230,000 ha area. Currently, another inventory is scheduled by local authorities (BBKSDA Papua) in collaboration with Scientific Authorities.

7. **Details of how CITES non-detriment findings are made, including the institutions involved in the process. We would be grateful if you could provide copies of any new or revised nondetriment findings**

The Scientific Authority (SA) establishes teams for evaluating trade of plant species, consisting of personnels from different research centres in the National Research and Innovation Agency (Indonesian: *Badan Riset dan Inovasi Nasional*-BRIN) and some personnels from the Management Authority (MA) of the Ministry of Environment and Forestry. The team gathers information from various sources, verified their validity at its best, based on scientific principles, and categorized their degree of reliability. Verification is carried out through discussions and visits to points of production, and documentation. Information and results of studies are often obtained sequentially, in accordance with the process and dynamics of trading activities.

The Management Authority (MA) and their field officers are SA's principal teammates in compiling the data, and prepare the assessment and reports. They are maintaining

historical records of trade licensing and corresponding activities. Another contributor who also plays the role in acquiring relevant data and information is the trader association. They hold documentation of their members' activities and often facilitate visit to processing sites. Other researchers from BRIN and universities are also involved in field studies on different aspects.

The SA and MA evaluate the imposed annual quota for appendix II species by conducting several meetings and data gathering, starting in the eighth and ninth months of each year. The latest quota and the number of products used were obtained from the records of permit letters that have been granted become the starting point to set the annual quota. Whenever necessary, extra field inspection would be suggested by the SA to the field officers whose results will be reported as additional data/information to be discussed in the final meeting. The evaluation result will become the bases for the quota setting for the following years.

8. **We also note that Indonesia has published quotas *Gyrinops* spp. for 2013-2016 (agarwood) and 2021-2023; please could you confirm whether these quotas apply to the species/genus in general, or whether they were established for specific part(s) or derivative(s) (i.e. chips, powder, oil, logs, timber, etc).**

As mention previously, specimens in the trade under the name Gyrinops spp. are derived from the sunken-wood known as decaying log. Based on this information, the quota for decaying logs were apply at the genus level.

Scientific Basis for Sustainable Trade of *Aquilaria malaccensis* from Malaysia as Requested by the 27th Meeting of the Plants Committee

1. Biological Data

Aquilaria (agarwood) or locally known as Karas, is one of the two genera of plants in the Thymelaeoideae subfamily of Thymelaeaceae family. Presently, the genus *Aquilaria* consists of about 21 species (Lee & Mohamed, 2016) and is distributed throughout Asia from India in the west to Indonesia in the east and China in the north (Hou, 1960; Whitmore, 1972). In Malaysia, five species are recorded, of which Peninsular Malaysia probably has all five species, i.e. *A. beccariana*, *A. hirta*, *A. malaccensis*, *A. microcarpa* and *A. rostrata*. Whereas in Sabah and Sarawak, three species are found, which are *A. beccariana*, *A. malaccensis* and *A. microcarpa*. The habitat for *Aquilaria* ranges from low to medium altitudes of forest with some species occurring from 1000–1700 m. The species also inhabit swampy forests, although rarely.

Physiologically, *Aquilaria* trees can grow up to 6m - 20m high. The leaves are alternate, with full margins and short, tapering tips. Usually the leaf size is 6cm - 8cm long and 3cm - 3.5cm wide. The flowers of the *Aquilaria* trees are yellow green and produced in pods while the fruit is a woody capsule 2.5cm - 3cm long. *Aquilaria* is priced for its agarwood, a resin produced from the tree's interaction with fungal (hence the name agarwood tree). Agarwood is primarily used in the perfumery, medicine and incense industries.

2. Population Distribution

Forest Research Institute Malaysia (FRIM) had conducted studies on the distribution, populations genetics and conservation for *Aquilaria* spp since 2011. Part of the findings and results were documented in the publication 'Conservation Action Plan for The Threatened Agarwood Species *Aquilaria malaccensis* (Thymelaeaceae) In Peninsular Malaysia' (Chua *et al*., 2016). For *A. malaccensis*, it can be found naturally in the forest reserves in the states of Kedah, Pulau Pinang, Perak, Selangor, Negeri Sembilan, Melaka, Johor, Pahang, Terengganu, Kelantan, Sabah and Sarawak. For *A. hirta*, the species is distributed in Kelantan, Terengganu, Pahang and Johor. *Aquilaria rostrata* is found in Terengganu and Pahang; *A. beccariana* in Johor (pending verification), Sabah and Sarawak; and *A. microcarpa* is also recorded from Johor (pending verification), Sabah and Sarawak (Tawan, 2004).

Being a common and widespread species, *A. malaccensis* can be found in various habitats in Peninsular Malaysia, such as in lowland dipterocarp forest, semi-freshwater swamp forest, and coastal hill forest. As for *A. hirta*, the species is confined to the east coast of Peninsular Malaysia and has been recorded in lowland forest bordering secondary forest, logged-over hill forest, periodically inundated freshwater swamp forest. Meanwhile, *A. rostrata* has been recorded in a hill forest in Gunung Tebu Forest Reserve. Not much information is available for *A. beccariana* and *A. microcarpa* although scattered information pointed that these two species were recorded from east Johor.

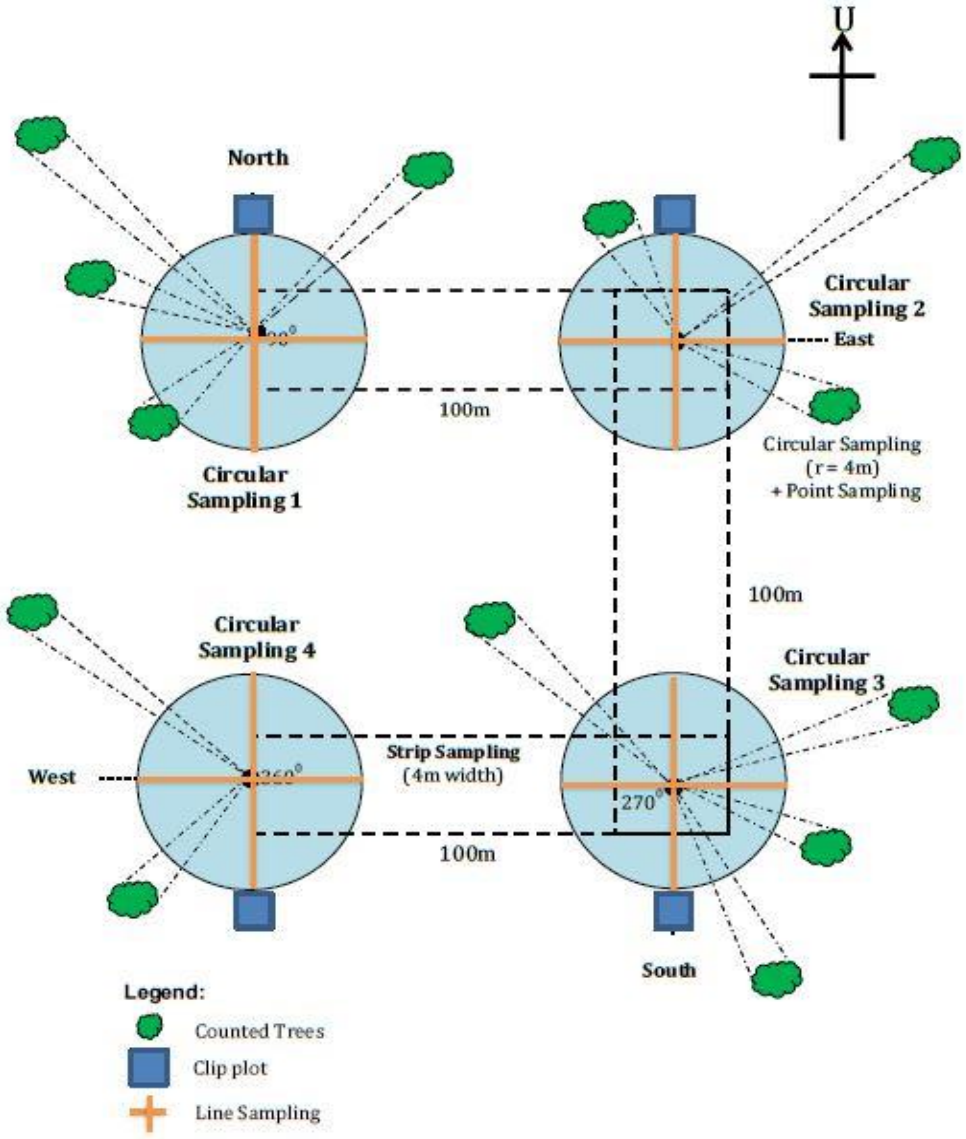
Globally, the range states for *A. malaccensis* includes Bangladesh, Bhutan, India (northeast India), Indonesia (Sumatra and Kalimantan), Iran, Malaysia, Myanmar, Philippines (southern Philippines), Singapore and Thailand (southern Thailand).

3. National Forest Inventory

The Forestry Department of Peninsular Malaysia (FDPM) has implemented a National Forest Inventory (NFI) every 10 years starting in 1970. The latest survey conducted by FDPM is the Sixth National Forest Inventory (NFI-6) which was carried out from 2020 to 2023 and the NFI-6 Report was published in October 2024.

The implementation of NFI-6 covers native land forest and swamp forest within Peninsular Malaysia and has been classified into 18 forest strata based on forest type, logging status and height above sea level of the forest area. The methodology used for the implementation of the NFI-6 census is based on the concept of stratified random sampling utilising the relaskop, where the distribution of each sampling unit for each of the 18 forest strata is made randomly (Figure 1).

Figure 1: Sampling unit design.



In this NFI-6 Report, the forest stands information that was counted included the total number of saplings, the number of small trees, the number of trees, the area of the base of the tree and the volume of the tree. No *Aquilaria* trees were found with a diameter of more than 50 cm and above. Based on the results of this NFI-6 Report, distribution of *Aquilaria* spp. trees was found in the following strata:

STRATA FOREST IHN-6 (With distribution of *Aquilaria* trees)	**STRATA CODE**
Virgin Forest: High Hill Forest	2
Logged Forest: High Hill Forest (1-10 years)	4
Logged Forest: Lowland Forest & Hill Forest (21-30 years)	7
Logged Forest: High Hill Forest (21-30 years)	8
Logged Forest: High Hill Forest (>30 years)	10
Virgin Forest: Peat Swamp	11
Logged Forest: Peat Swamp (>40 years)	13
Protected Forest: Lowland Forest & Hill Forest	16

NFI-6 census was conducted within areas classified as Permanent Conservation Forests (PCF) in Peninsular Malaysia and did not cover other type of land. For tree with diameter less than 30cm, the *Aquilaria* species that were identified are *A. malaccensis (63%)*, *A. hirta (33%) and A. beccariana (4%).* For trees with diameter more than 30cm, due to limitation of the survey, *Aquilaria* trees that were identified registerd as *Aquilaria* spp. By extrapolation of the NFI-6 census data, the estimated total number of wild *Aquilaria* trees (diameter >30cm) in PCF can be determined as follows:

FOREST CLASSIFICATION	**FOREST CLASSIFICATION AREA (hectare)**	**NUMBER OF KARAS TREES HECTARE (Tree/ha.)**	**TOTAL NUMBER OF KARAS TREES (> 30cm) (Tree)**
Permanent Conservation Forests in Peninsular Malaysia			
Protection	1,698,042	0.6620	1,124,103.80
Production*	2,390,281	0.3365	804,329.56
Peat Swamp	243,673	0.5024	122,421.32

* In land forest

Only trees within area classified as production forest can be harvested. Based on the NFI-6 data together with a set of parameters, the sustainable off-take of *Aquilaria malaccensis* can be calculated as follows:

Calculation:

- *The stock of Aquilaria malaccensis trees within production forest with a diameter of over 30 cm is 506,727.62 trees (804,329.56 Aquilaria spp. trees x 63% ratio).*
- *The total yield of wood per tree is 1.3459 m^3. Total yield of Aquilaria malaccensis is 682,004.70 m^3 (506,727.62 trees x 1.3459 m^3).*

- *The cycle of harvest is set at 50 years. The total number of Aquilaria malaccensis trees that can be harvested each year is 10,134.55 trees (506,727.62 trees/ 50 years) with annual yield of 13,640.09m^3.*
- *The production of Agarwood wood chips (woodchips) for each m^3 is 25%. The density of air-dry wood used is 400 kg/m^3 (density for Light Hardwood).*
- *Maximum weight of Aquilaria malaccensis specimens that can be produced annually is 1,364,009 kg (13,640.09m^3 annual yield x 25% x 400 kg/m^3 density),*
- *Only 10% of the agarwood tree population contain agarwood resin. Therefore, the maximum export quota of Aquilaria malaccensis is 136,400 kg. (1,364,009 kg Aquilaria malaccensis x 10%).*

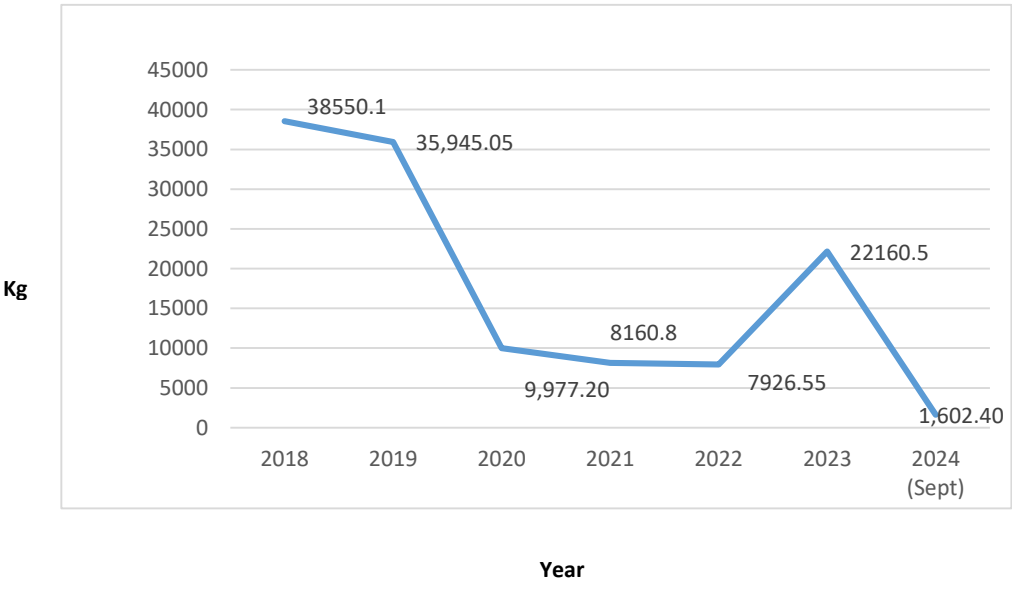
4. Agarwood Plantation

The very high demand and rising market prices have made agarwood an increasingly thriving industry, owing to its significance and applications in medicinal purposes, fragrances, cosmetics, and more. This industry is also expected to serve as a catalyst in advancing biotechnology applications within national timber industry, thereby contributing to the growth of national income. To encourage the establishment of agarwood plantations in response to the growing demand for agarwood products, MTIB provided incentives for registered agarwood planters, while licensing requirements has been eased. Currently, there are 239 active agarwood plantations across Peninsular Malaysia, who are predominantly small-scale farmers, comprising 1,179,487 *Aquilaria* spp. trees.

5. Proposed Interim Export Quota

Based on the annual trade data since 2018, the export performance of *Aquilaria* spp. sourced from wild is in decreasing trend (Figure 2). This is due to reducing stock of harvested wild *Aquilaria* trees as well as declining demand of agarwood products in the international market.

Figure 2: The export performance of *Aquilaria* spp. from 2018 to September 2024 (Source Code W)



In view of the NFI-6 data of wild *Aquilaria* trees, encouraging development of the agarwood plantation sector, noting the decreasing trend of export of wild agarwood and the estimated sustainable annual production of wild *Aquilaria malaccensis* specimens of 136,400 kg, Malaysia is proposing an **interim conservative export quota of 5,000 kg of *Aquilaria malaccensis* sourced from wild for the year 2025 until 2027**.

6. Trade Control

Malaysian Timber Industry Board (MTIB) is the CITES Management Authority for *Aquilaria* spp. in Peninsular Malaysia. MTIB also administered the plantation of *Aquilaria* trees in areas excluding Permanent Conservation Forests in Peninsular Malaysia which falls under the jurisdiction of FDPM. To ensure wild harvested *Aquilaria* specimens are correctly identified and distinguishable from artificially propagated specimens, any application to export *Aquilaria malaccensis* shall be reviewed by the MTIB Export Committee. The enforcement team also conduct physical inspection of the specimen prior to shipment.

Accurate plant species identification and tracking of their geographical origins along the chain of custody are fundamental and necessary to combat illegal harvesting and associated trade (Lee *et al*., 2022). Using approaches such as DNA barcoding, population genetics and DNA profiling, FRIM has developed a tracking tool of *A. malaccensis* in the context of forensic identification and chain of custody certification. In several cases, FRIM provided evidence for legal prosecution of illegal harvesting.

7. Conservation

Over the past years, Malaysia has implemented various projects to enhance the effectiveness of the management and conservation of *Aquilaria malaccensis*. In general, these projects, with support from international organizations, were designed to gather scientific information on the *Aquilaria malaccensis* population, biological, ecological and genetics, and to develop a database to store valuable information about the species.

In addition, three *A. malaccensis* arboreta were established by FRIM with the primary purpose is to conserve the species' genetic diversity through the idea of a common garden. Planting materials were sourced from populations identified through the population genetic study. The full guidelines for establishing *A. malaccensis* arboretum in Peninsular Malaysia are presented in Lau *et al.* (2023).

Prepared by:

CITES Unit
Biodiversity and Forestry Management Division
Ministry of Natural Resources and Environmental Sustainability

Further reading:

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REPUBLIC OF MOZAMBIQUE
MINISTRY OF LAND AND ENVIRONMENT
NATIONAL ADMINISTRATION OF CONSERVATION AREAS

Conservative quota for *Dalbergia melanoxylon* of Mozambique

How the national quota of commercial timbers is estimated in Mozambique?

In Mozambique the National Forest Inventory (NFI) represents the country wide tool for estimating the growing stock of commercial wood species, from which the annual allowable harvesting volume is calculated and reported in confidence intervals [X-Y]. For example, according to the last NFI reported in the year 2018, the estimated allowable harvesting volume lower limit is 1 684 181 m^3/year and the upper limit is 2121017 m^3/year for all commercial timbers, i.e. [1 684181– 2121017] m^3/year.

The reported figures describe standing trees of commercial species that have already reached the minimum cutting diameter as per the Forest Law Regulation. Note that our NFI is carried out every ten (10) years and the next will take place in the year 2028.

However, NFI is merely strategic due to its scale and coverage, but it is supplemented by provincial forest inventory data and ultimately the quotas are estimated from the actual forest management plans after detailed forest inventories are carried out at concessions level.

In fact, Mozambique national quota for any particular wood species is very conservative since the lower extreme of the reported interval is used and most loss factors such as forest fires, shifting cultivation, seedlings mortality, charcoal production are also considered.

However, reports of illegal logging are increasingly published in recent years and despite ineffective law enforcement, seizures of illegal consignments are also taking place, especially for in demand species such *as Dalbergia melanoxylon*.

Therefore, in response to CITES PC27 notification for Mozambique's *Dalbergia melanoxylon*, a science based conservative quota was calculated by reducing from 60% up to 65% of the

prescribed volumes to address concerns of overexploitation and illegal exports as per the table below.

Harvesting site				
Province	**Present quota (m^3)**	**Reduction factor**	**New conservative quota (m^3)**	**Severity risk**
Niassa	750	0.65	262.5	High
Cabo Delgado	10000	0.65	3500	High
Nampula	*5000*	*0.6*	2000	Moderate to high
Zambézia	3500	0.6	1400	Moderate to high
Tete	1000	0.6	400	Moderate to high
Sofala	*1000*	*0.6*	400	Moderate to high
Manica	1000	0.6	400	Moderate to high
Inhambane	500	0.6	200	Moderate to high
Gaza	500	0.6	200	Moderate to high
National annual quota (m^3)	**23250**		**8762.5**	

The severity risk was assessed based on harvesting provinces with the highest likelihood for illegal logging, namely Niassa and Cabo Delgado. As a precautionary measure, Mozambique proposes to reduce its current quota of 23250 m^3/year down to a very conservative quota of only 8762.50 m^3/year for *Dalbergia melanoxylon*. The new quota corresponds to 62.31% reduction as a commitment to address the raised concerns by the CITE Secretariat.

Mozambique Forest Law Enforcement Agency is presently engaged in elaborating a ten (10) years (2025-2035) national strategy to tackle illegal logging and we expect to reduce the concerning figures presented in the graph bellow.

Maputo, 14th November, 2024

THE UNITED REPUBLIC OF TANZANIA

MINISTRY OF NATURAL RESOURCES AND TOURISM

REVIEW OF SIGNIFICANT TRADE IN SPECIMENS OF APPENDIX II SPECIES [(RESOLUTION CONF. 12.8 (REV.COP 18)]

RESPONSE ON SHORT TERM ACTIONS FROM THE UNITED REPUBLIC OF TANZANIA ON DALBERGIA MELANOXLON AND OSYRIS LANCEOLATA

NOVEMBER 2024, DODOMA

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1.0 BACKGROUND

1.1 Forests Management in Tanzania

Forested land in Tanzania Mainland is estimated to 48.1 million ha (MNRT, 2015), which is equivalent to 55% of total surface land area. The forests are the extent of distribution based on forest types is as follows: Woodlands cover 44.6 million ha (93%) of the forestland while catchment forests; mangroves, coastal forests and government forest plantations occupy 3.4 million ha (7%). Furthermore about 20 million ha of the forestland is production forests and 28 million ha are protected forests found in forest reserves and other protected areas. The regeneration of natural forests is quite good – up to 3000 tree seedlings/wildings per ha. The growing stock is estimated as 3.3 billion m^3, of which closed forests account for 11.3% while woodlands account for 73.9%. The remaining 14.8% is accounted for by Trees outside Forests (ToF). Based on the forested land in Tanzania, the existing forest tenure arrangements are under central government (34.5%), local government (6.5%) and village governments (45.7%), private (7.3%) and unreserved forests (6.0%) (**Table 1**). The highest percentage of forestland is owned and managed by village governments. However, 19.67 million ha (89.8%) of forests in village lands is unreserved (open access forest areas) and is subjected to unsustainable practices such as agricultural expansion, wild fires, livestock grazing and illegal harvesting.

Table 1: Forest tenure arrangements in Tanzania

Tenure Holders	Area (ha) * 1000	Percentage (%)
Central Government	16,610.60	34.5
Local Government Authorities	3,107.40	6.5
Village Governments	21,975.10	45.7
Private Sector	3,515.90	7.3
General land (unreserved forests)	2,881.70	6
Total	48,090.70	100

1.2 Policy and Legal Framework

The primary obligation of Tanzania's forest policy is to have long term plans on the supply of wood raw materials for the industries and other uses. This advocates the need to strengthen the management of plantation forests by improving tending operations to ensure sustainable and good quality of raw material. Several initiatives

has been conducted to overcome these challenges including developing strategies, plans, programmes such as the Forest Policy Implementation Strategy (2021-2026), TFS Strategic Plan (2020/2021-2025/2026), and MNRT Strategic Plan (2020/2021-2025/2026). In accordance with the National Forestry Policy of 1998, the Forest Act No. 14 of 2002 provides the legal framework to implement the National Forest Policy. Together with other objectives stipulated in the Act, the Forest Act (2002) aims to encourage the principles of sustainability in connection with the harvesting of forest produce. The Act obliges the establishment of forest management plans for all types of forests to ensure sustainable management in the long term. The legal bases under the Forest Regulations (2004) and the Government Notices made under Section 106(1) of the Forest Act, regulate harvesting and export of some tree species including *Dalbergia melanoxylon* except *Osyris lanceolata* which was banned since 2004 through Government Notice Number 335 of 10/09/20283 (**Annex I**). The regulation prohibits harvesting of *O. lanceolata* and restricts the export of its products unless the raw materials are imported and processed in the country. Also, the regulation prohibits the export of large consignments of *Dalbergia melanoxylon* raw wood unless it is in the form of semi-processed or finished products. It can be concluded here that given the existing raw material in both natural forests, plantations and farmlands and given improved management of the forests as well as policy and mills the role the wood industry plays to the national economy can significantly be increased.

1.3 Enforcement

Existence of policies and legal frame works that guides forest management in the country (as indicated in Section 1.2), provides smooth undertaking of enforcement strategies. The undertaking of the enforcement at various value chains of the trade of tree species in the country has been achieved as a result of good policy and legal framework environment, which enables develop of various enforcement tools. The enforcement tools available includes; check points on roads, log trucking systems, Antipoaching Unit, as well as the Joint Port Control Unit (JPCU). There is also Forest Surveillance Unit (FSU) that oversees enforcement of forest and beekeeping policy, law and regulation within TFS jurisdictions as per Agency Establishment Order of 2010 CAP 245 R.E.2022. The following are the functions of the Forest Surveillance Unit has the following major functions. To advice on matter related to intelligence, investigation and prosecution on forest crimes. To ensure compliance on harvesting and trade of

forest products and services. To oversee the enforcement of forest policy and legislation. To review guidelines for licensing, revenue collection, quality control and assurance of forest products and services. To coordinate and review various document (leaflets, booklets, permits, forms) concerning timber trading. To record and report on illegal harvesting and trading activities and impose appropriate measures for the culprits and. To provide strategic direction on issues related to investigation concerning forest crimes.

1.4 Community Engagement

The National Forest Policy of 1998 and the Forest Act No.14 of 2002 together with associated regulations guide the forest sector in Tanzania. These two important forest governance instruments recognise Participatory Forest Management (PFM) as a strategy to achieve sustainable forest management through encouraging the management or co-management of forest and woodland resources by the communities living closest to the resources. The two instruments describe the aim of PFM as being “to delegate responsibility for the management of forest resources to the lowest possible level of local management consistent with the furtherance of national policies.”

PFM in Tanzania comes in two main types namely Joint Forest Management (JFM) and Community-Based Forest Management (CBFM). Whereas JFM involves the co-management of Forest Reserves between government, which may be either the TFS or District Councils, and forest adjacent villages, CBFM is realized where local villages, or sub-groups within the village, are the sole forest owners and managers by virtue of establishing various forms of communally or privately reserved forests on village lands. As such, CBFM takes place on forests that are owned and managed by the Village Council on behalf of the Village Assembly and leads to the establishment of Village Land Forest Reserves (VLFR), Community Forest Reserves (CFR) or Private Forest Reserves (PFR). Under CBFM management scheme, villagers may decide to set aside, or “reserve” a forest area for a range of reasons. In some cases, it is because they have seen their forests declining through poor management or uncontrolled utilization. In other cases, communities may wish to set aside a bare area for forest restoration. Alternatively, as it is the case in the new generation of CBFM initiatives,

villagers may wish to reserve their forest because it has significant economic potential and they wish to obtain tangible benefits from sustainable harvesting.

1.5 Role of the Forest Sector in the Economy

Forestry is one of key economic sectors in driving the national industrialization agenda and livelihood improvement. The sector has relatively great potential on promoting both rural and urban development. In addition, it has significant contribution to employment creation, Gross Domestic Product (GDP) and fiscal revenues. The sector has rich value chains with the potential to reduce the balance of trade deficit. In 2020, forest sector in Tanzania was estimated to have a total Gross Value Added (GVA) of TZS 4.65 trillion, contributing about 3.3% to the national Gross Domestic Product (GDP) (MNRT, 2021). The value is from different products including charcoal, firewood, logs, poles, honey and beeswax, wild fruits, gums and resins, withies, seeds and seedlings production.

Logs were harvested from woodlots, plantations and natural forests which had a value of GVA TZS 189,541,323,923 which is equivalent to 4.08% of the forest sector contribution. *Dalbergia melanoxylon* Guill. & Perr. is among tree species harvested from natural forests in the country processed into either sawn wood or clarinets from harvested logs. Value chain of *Dalbergia melanoxylon* Guill. & Perr. includes different people within different social groups who are directly or indirectly involved including youths, women, marginalised and disabled social group of which all of them earn income within the value chain of *Dalbergia melanoxylon* Guill. & Perr. The revealed contribution to the GDP is also due to its recorded economic value. Therefore, *Dalbergia melanoxylon* Guill. & Perr. being among the tree species harvested within the natural forests has also significant contribution to the national economy.

1.6 Why this response to CITES Secretariat

The United Republic of Tanzania is making response to the CITES Secretariat with regards to the outcome of the discussions that took place at the 27th meeting of the Plants Committee (PC27, Geneva, July 2024) regarding the Review of Significant Trade in specimens of Appendix-II species, and in particular concerning *Dalbergia melanoxylon* and *Osyris lanceolata* from United Republic of Tanzania. The Plants Committee at PC27 categorised *Dalbergia melanoxylon* and *Osyris lanceolata* from

United Republic of Tanzania as “Action is Needed” and made short-and long-term recommendations in this regard as indicated in **Table 2 and 3**, respectively.

Table 2: Recommended actions for *Dalbergia melanoxylon*

Recommended Action	**Time-frame for implementation**	**Justification for choice of recommended action**
Short-term Actions i. Provide clarification regarding the discrepancies between the export volumes reported by the CITES MA ofTanzania (TZ) in response to the RST Consultation and export volumes reported in the CITES Trade Database	90 days following notification from the CITES Secretariat of the recommendations of the 27th meeting of the Plants Committee	There appears to be a discrepancy between trade data presented in the CITESTrade Database and Tanzania’s reported export volumes
Short-term Actions ii. Provide information on the locationand extent of the areas under harvest management for export. iii. Submit management plans includingany available information on inventories and monitoring systems currently in place.	90 days following notification from the CITES Secretariat of the recommendations of the 27th meeting of the PlantsCommittee	Supporting information forfuture development of a science-based NDF(s)
Long-term Actions iv. Develop non-detriment findings for allpopulations of *Dalbergia melanoxylon*intended for export to enable the setting of an export quota at the relevant management unit level(s).	24 months following notification from the CITES Secretariat of the recommendations of the 27th meeting of the PlantsCommittee	Non-detriment findings are required for all populations of *Dalbergia melanoxylon* intended for export, to ensuresustainable annual harvest atthe relevant management unitlevel.

Table 3: Recommended actions for *Osyris lanceolata*

Recommended Action	**Time-frame for implementation**	**Justification for choice of recommended action**
Short-term Actions Establish, in consultation with the Secretariat and the Chair of the PlantsCommittee, a zero export quota within90days for *Osyris lanceolata* and communicate the quota to the Secretariat. No exports should occur until the quota has been published on the Secretariat’s website. The export quota should be justified as conservative based on estimates of sustainable off-take that make use of available scientific information. Before making any increases to this interim quota, the planned changes should be	90 days following receipt of notification from the CITES Secretariat of the recommendations of the27th meeting of the Plants Committee	Precautionary approach as export levels appear unsustainable and immediate action is required

Recommended Action	Time-frame for implementation	Justification for choice of recommended action
communicated by the range State to the Secretariat and Chair of the Plants Committee along with a non-detriment finding justifying how the change is conservative, based on estimates of sustainable off-take that make use of available scientific information, for their agreement.		

The current presentation in Section 2.0. is about responses on Short term Action as shown in Table 1 and 2.

2.0 RESPONSES ON SHORT TERM ACTIONS

2.1 Short Term Actions for *Dalbergia melanoxylon*

2.1.1 Clarification regarding the discrepancies between the export volumes reported by the CITES MA of Tanzania (TZ) in response to the RST Consultation and export volumes reported in the CITES Trade Database

The CITES Management Authority of Tanzania acknowledges the review done by the CITES Secretariat as well as information on export volumes reported by the CITES Trade Database 2024, which was compiled by the UN Environment Programme (UNEP) - World Conservation Monitoring Centre (WCMC). The export volume that was reported by the CITES MA of Tanzania were lower than that reported in the CITES Trade Database 2024, due to instability of data systems thus not being robust to capture multiple data at a time. Currently, the CITES MA of Tanzania has established a robust electronic (online) system that is used to capture all wood materials being traded. The online system known as MNRT Portal that can be accessed through the URL https://portal.maliasili.go.tz.

We have also recorded more export volumes in 2021 and 2022 (**Table 4**) when comparing with the data in the CITES Trade Database (**Table 5**) in the carvings under the purpose of 'Person'.

In that regards, the CITES MA of Tanzania would like to submit the export volume that is more or less similar to that of CITES Trade Database 2024.

Table 4: Direct Exports of *Dalbergia melanoxylon* from Tanzania 20217 – 2022, reported by CITES MA (TZ)

SN	Term	Unit	Purpose	Source	Reported by	2017	2018	2019	2020	2021	2022	Total
1	Carvings	kg	P	W	Exporter			225	501	1201.9*	3809.2*	5737.14
					Importer	1*		182	52	69		304
			Q	W	Exporter			72				72
					Importer							0
			T	O	Exporter							0
					Importer		112					112
				W	Exporter		23	1060	5287		1076	7446
					Importer		157			358		515
		Number of specimens	T	W	Exporter							0
					Importer			659	1			660
2	Logs	m^3	T	W	Exporter							0
					Importer						18	18
3	Sawn wood	kg	T	W	Exporter	44400	626	27736				72762
					Importer			107080				107080
		m^3	T	W	Exporter	45	172	20	82	42.97*	269.58**	631.55
					Importer	11	48	20	58*	135	298	570
		Number of specimens	T	W	Exporter		8700					8700
					Importer							0
4	Timber	kg	T	W	Exporter		44400					44400
					Importer							0
		m^3	T	W	Exporter	11						11
					Importer			4				4
5	Wood products	kg	T	W	Exporter							0
					Importer		240			5000		5240
		m^3	T	W	Exporter							0

				Importer	2		30			8	40
	Number of specimens	T		Exporter							0
				Importer	3650*						3650*
	Number of specimens	E	W	Exporter							0
				Importer		19					19
			O	Exporter							0
				Importer	16500						16500
			W	Exporter		8700					8700
				Importer		148687	58731			2	207420

Source: CITES Management Authority of Tanzania

*The data is not reported in the CITES Trade Database 2024

**Both Management Authority (269.58 m^3) and CITES Trade Database (259 m^3) reported the value. Therefore recorded data from the Management Authority of Tanzania show an increase of export volume by 10.58 m^3 denoting insignificant difference between the two sources.

Some definitions:

i. Purpose Codes:
- T: For commercial
- Q: For circuses and travelling exhibitions
- P: For personal
- E: For education

ii. Source Codes:
- O: Pre convention (may be used with other source codes)
- W: Specimen taken from the wild

Table 5: Direct Exports of *Dalbergia melanoxylon* from Tanzania, 20217 – 2022 reported by CITES Secretariat

SN	Term	Unit	Purpose	Source	Reported by	2017	2018	2019	2020	2021	2022	Total
1	Carvings	kg	P	W	Exporter			225	501			726
					Importer			182	52	69		303
			Q	W	Exporter			72				72
					Importer							
			T	O	Exporter							
					Importer		112					112
				W	Exporter		23	1060	5287		1076	7446
					Importer		157			358		515
		Number of specimens	T	W	Exporter							
					Importer			659	1			660
2	Logs	m^3	T	W	Exporter							
					Importer						18	18
3	Sawn wood	kg	T	W	Exporter	44400	626	27736				72762
					Importer			107080				107080
		m^3	T	W	Exporter	45	172	20	82		259	578
					Importer	11	48	20		135	298	570
		Number of specimens	T	W	Exporter		8700					8700
					Importer							
4	Timber	kg	T	W	Exporter		44400					44400
					Importer							
		m^3	T	W	Exporter	11						11
					Importer			4				4
5	Wood products	kg	T	W	Exporter							
					Importer		240			5000		5240
		m^3	T	W	Exporter							

				Importer	2		30			8	40
	Number of specimens	T		Exporter							
				Importer							
	Number of specimens	E	W	Exporter							
				Importer		19					19
			O	Exporter							
				Importer	16500						16500
			W	Exporter		8700					8700
				Importer		148687	58731			2	207420

Source: CITES Trade Database 2024. Complied by UNEP-WCMC for the CITES Secretariat. Available at: trade.cites.org. Accessed 11/04/2024

2.1.2 Information on the location and extent of the areas under harvest management for export

Wood harvested for export is harvested in either National Forest Reserve under the Central Government or Village Land Forest Reserves, which are under the Local Government Authority. Recently harvesting has been done at Malehi Forest Reserve and Mitarure in Lindi Region.

2.1.2.1 Malehi Forest Reserve

Malehi Forest Reserve is found in Kilwa District in Lindi Region, Tanzania. The forest reserve is located between 469874 to 498202 E and 8926166 to 8947686 S (**Figure 1**). Malehi Forest Reserve has a total size of 38,850 ha (150 square miles), which is equal to or 388.5 square km, and a distinct boundary between the forest and the nearby village land forest reserves that is 79.88 km long and is marked by 43 corner beacons (**Annex I**).

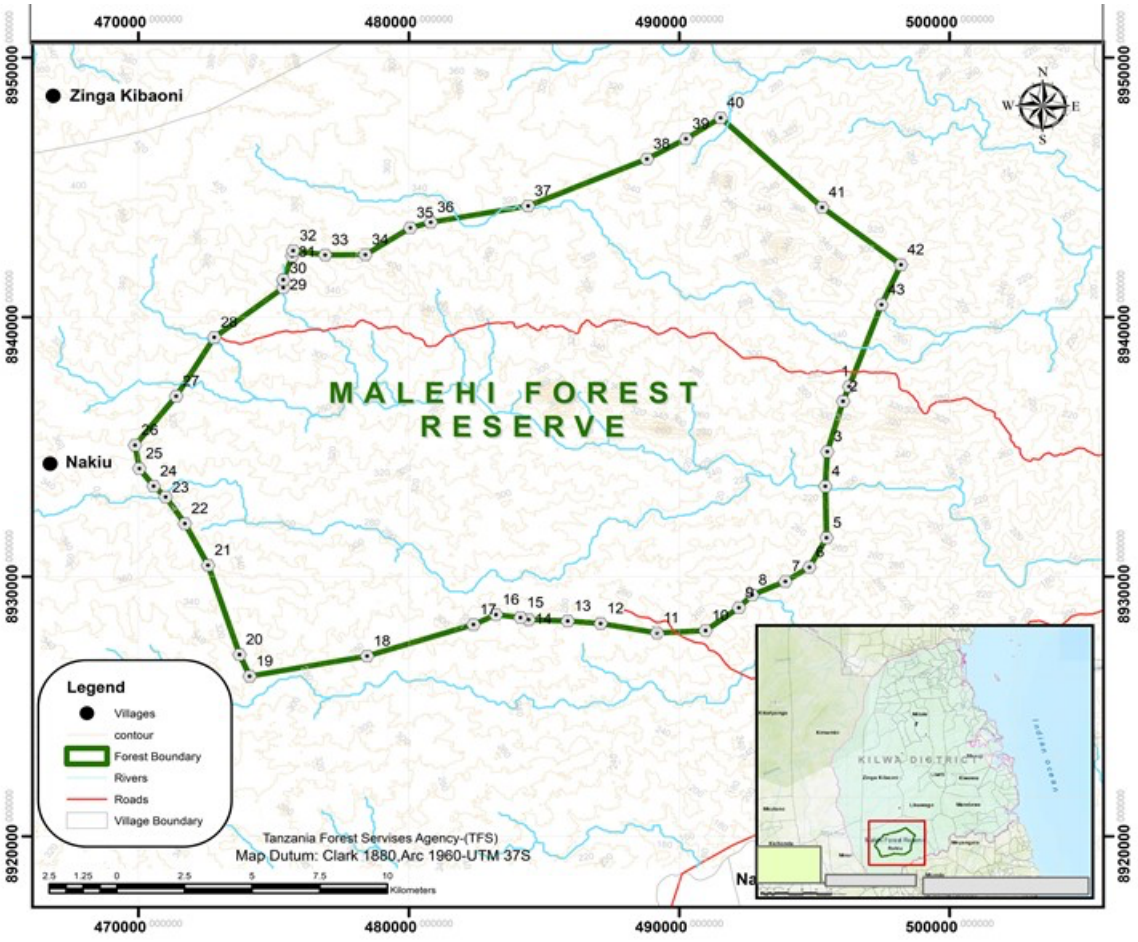

Figure 1: Location map of Malehi Forest Reserve, Kilwa District, Tanzania

Malehi Forest Reserve is predominant comprised with natural vegetation know as Miombo woodlands. The examination of the inventory data reveals that there are more than 112 species in the forest reserve, with *Combretum collinum, Combretum molle, Combretum zeyheri, D. melanoxylon, Diplorhynchus condylocarpon, Julbernardia globiflora, Philenoptera bussei* and *Pteleopsis myrtifolia,* being the dominant ones. Additionally, there are areas of bamboo species (*Oxytenanthera abyssinica*) and tall grasses like elephant grass (*Pennisetum purpureum*), *Panicum virgatum*, and *Bothriochloa inscalpta* in the forest reserve that provide shelter and food for wildlife. All these vegetation make up the vegetation cover at Malehi Forest Reserve as one ecosystem.

The forest inventory data show presence of tree regeneration which is dominated by *Combretum molle, Commiphora mossambicensis, Dalbergia melanoxylon, Dichrostachys cinerea, Diplorhynchus condylocarpon, Julbernardia globiflora,* and *Philenoptera bussei*. The regeneration potential in the forest indicate that the forest reserve is healthy.

Moreover, to ensure ecological stability and functions, Malehi Forest Reserve is surrounded by natural forests which act as buffer zone to the forest. The reserve is surrounded by two village land forest reserves (Mbumbila 'A' & 'B') of Nanjirinji Village. Additionally, Mitarure, Ngarama North and Rungo Forest Reserves area in Kilwa District (**Figure 2**). These forests support forest vegetation and acts as a buffer to the reserved forest by providing forest products hence reducing the pressure on the forest reserve. Local communities who are living adjacent to the forest reserve depend on these natural forests for firewood, timber, thatching grasses, withies and poles. These natural forests form a continuation of forest cover with the reserve. The forest is a wildlife corridor in which the wild animals pass to Selous Game Reserve.

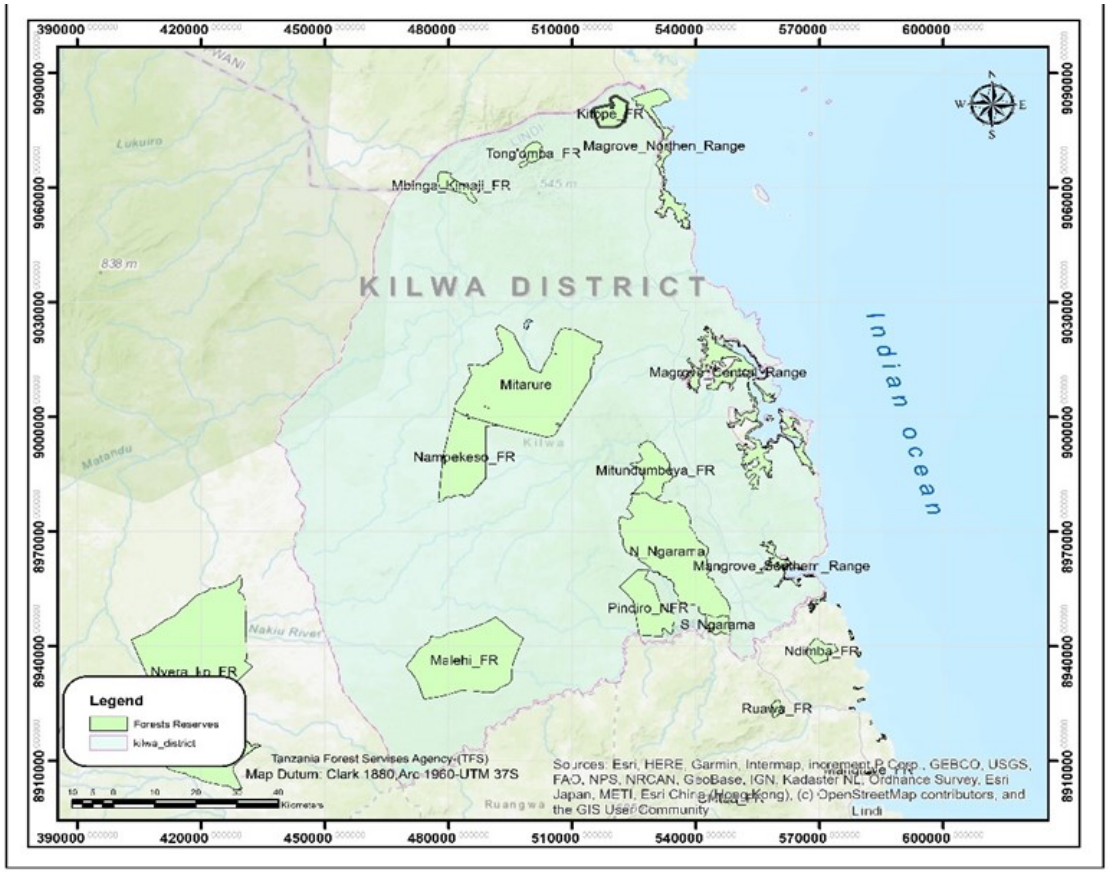

Figure 2: Buffer zone map of Malehi Forest Reserve, Kilwa District, Lindi Region Tanzania

2.1.2.2 Mitarure Forest Reserve

Mitarure Forest Reserve is a central government reserve managed by the Tanzania Forest Services Agency (TFS) of the Ministry of Natural Resources and Tourism. It was gazetted as a productive forest reserve by the British colonial government in 1957 through Government Notice (GN) No. 313 with boundary map (JB) Number 328. The forest reserve is located between 8994680 to 9023975 S and 481457 to 517275 E situated in Kilwa District in Lindi Region (**Figure 3**). Mitarure Forest Reserve has a total area of 62,567.43 ha (241.57 square miles) (**Annex II**).

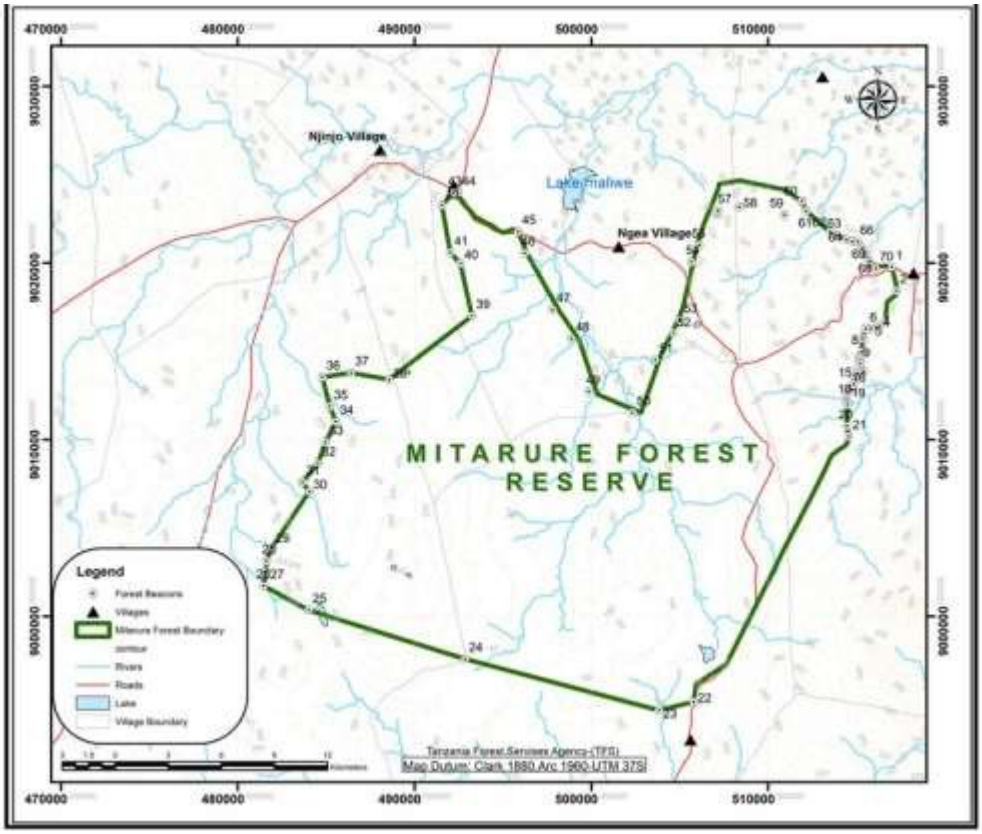

Figure 3: Location for Mitarure Forest Reserve, in Kilwa District, Lindi Region

The natural vegetation at Mitarure Forest Reserve is dominated by Miombo woodlands. The reserve is composed of more than 125 species dominated by *Diplorhynchus condylocarpon, Brachystegia boehmii, Brachystegia spiciformis, Combretum collinum, Combretum zeyheri*, *D. melanoxylon*, *Julbernardia globiflora, Millettia stuhlmannii, Pseudolachnostylis maprouneifolia,* and *Pteleopsis myrtifolia*.

The reserve is a potential source for wood and non-wood forest products such as timber, building poles, bee products and weaving materials. Lowland areas of the reserve are covered with grasses, which form the shelter and fodder for wildlife. In the purpose of wood harvesting, the whole forest area is considered a single harvesting block due to the uneven distribution of timber trees species for harvesting in natural forest. About 13 different tree species are potential for being harvested for production of saw logs, sawn timber and slippers. Species identified for production are *Afzelia quanzensis*, *Aganope stuhlmannii*, *Amblygonocarpus andongensis*, *Brachystegia spiciformis*, *Burkea africana*, *D. melanoxylon*, *Julbernardia globiflora*, *Millettia*

stuhlmannii, *Mimusops schliebenii*, *Pericopsis angolensis*, *Pseudolachnostylis maprouneifolia*, *Pteleopsis myrtifolia* and *Pterocarpus angolensis*.

On the other hand, the forest reserve is surrounded by natural forests either in general or village land forest reserve, which support forest vegetation that acts as a buffer to the reserved forest. These natural forests form continuous forest cover with the reserve at all parts. Village forest reserves in the communities of Nainokwe, Ngea, and Kikole surround Mitarure FR. These forest reserves are harvested to meet local wood demand, which eases pressure on the forest's natural resources. Additionally, the forest is bordered by the Malehi, Ngarama North, and Mangrove Forest reserves (**Figure 4**), which help meet the demand for wood materials for various uses at local and international perspective.

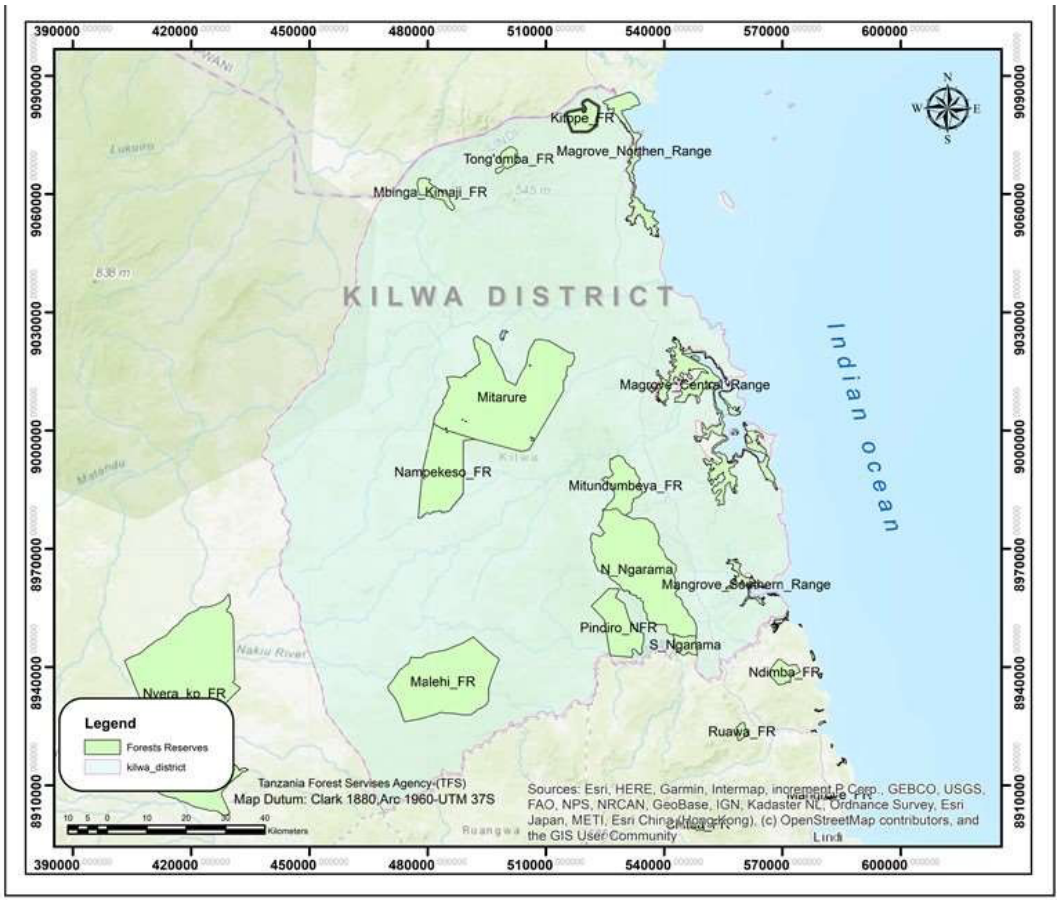

Figure 4: Map showing forests that surround Mitarure Forest Reserve, Kilwa District, Lindi Region

On the other hand, forest inventory data indicate high regeneration of the tree species in the reserve (**Figure 5**), which was dominated by *Diplorhynchus*

condylocarpon, Combretum zeyheri, D. melanoxylon, and*Diospyros fischeri*. The regeneration potential indicate that the reserve is healthy.

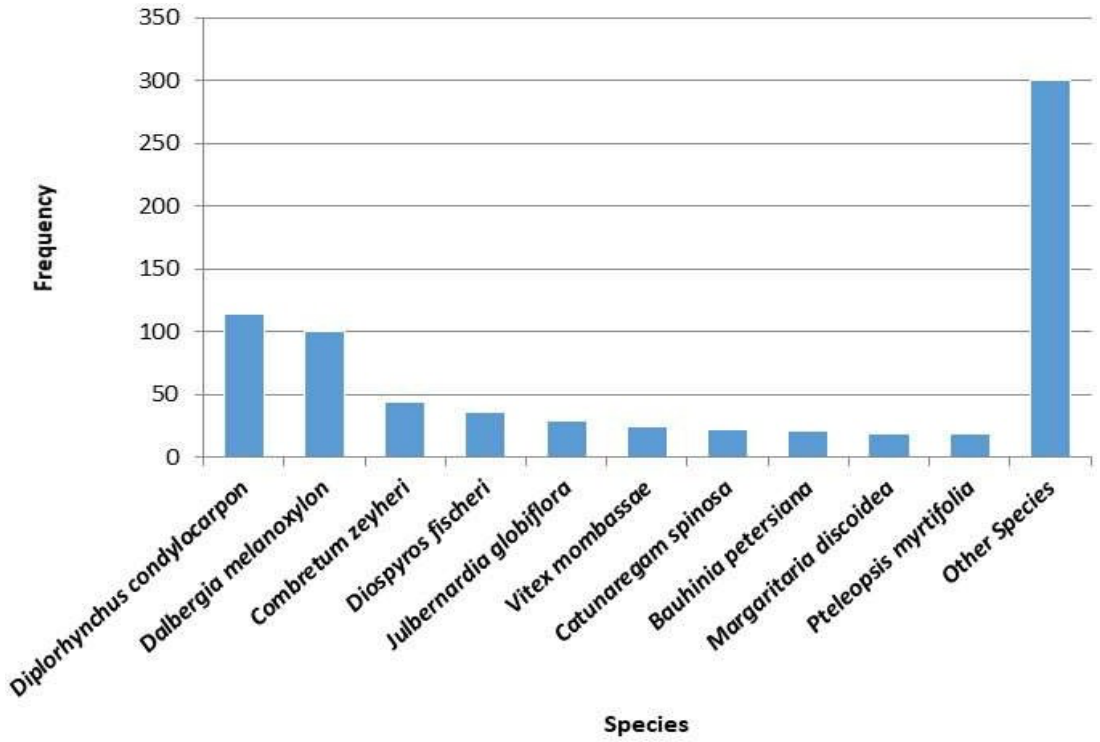

Figure 5: Tree species regenerations potential in Mitarure forest reserve

2.1.3 Management plans including any available information on inventories and monitoring systems currently in place

In the United Republic of Tanzania, there are several forest management units which have *D. melanoxylon* among other natural tree species. Among the forest Management units are the Malehi and Mitarure forest reserves. Management Plans for the forest management units are presented as attachment to this report. The Forest Management plans indicate that *D. melanoxylon* is among the tree species harvested for different purposes including carvings and sawn wood. Inventory information is also presented in the Management Plan. Monitoring systems is in place which involve use the Integrated Management Information System known as FREMIS – which stands for Forest Resource Management Information System. The system monitors movement of forest products during transportation from the source to end destination.

2.2 Short Term Actions for *Osyris lanceolata*

2.2.1 Establishment of a Zero Export quota for *Osyris lanceolata*

In Tanzania, *Osyris lanceolata* has been banned from harvesting in the wild since 2004. Some data were reported in the CITES Database 2024 do not reflect the reality about its originality. This is due to some errors during coding as some of the Sandalwood raw materials were sourced outside the United Republic of Tanzania (i.e. from abroad such as Australia, Democratic Republic of Congo, South Sudan, and India). Also, it is important to note that, not all imported Sandalwood raw materials were of *O. lanceolata*. *O. lanceolata* were only important in its range state including the Democratic Republic of Congo. Imports from Australia and India are for different Sandwood species, which were *Santalum lanceolatum* and *Santalum album* both belonging to Santalaceae family, of which *O. lanceolata* belongs too. In that regard, Tanzania establishes a zero quarter for *Osyris lanceolata* that is sourced from the wild within the United Republic of Tanzania.

3.0 CONCLUDING REMARKS

It has been noted that, the export volume we (CITES MA of Tanzania) reported were lower than that reported in the CITES Trade Database 2024, due to instability of data systems thus not being robust to capture multiple data at a time. Also some of the data were analogy form, thus making difficult to track them on time. Currently, the CITES MA of Tanzania has established a robust electronic (online) system that is used to capture all wood materials being traded.

Recently *D. melanoxylon* wood has been harvested in several forest reserves managed by both Central and Local Governments, including the Malehi Forest Reserve (38,850 ha) and Mitarure Forest Reserve (62,567.43 ha) located in Kilwa District, Lindi Region.

With regards to *Osyris lanceolata,* Tanzania banned harvesting of the latter species since 2004. Therefore, the country set a zero quota for the *Osyris lanceolata*. However, Sandalwood[1] dealers in the country have been importing raw materials of

[1] Sandalwood is a generic term or class of woods from trees in the Santalaceae family, composed of woody flowering plants. Several species, produce highly aromatic wood, used for scents and perfumes and for herbal medicine.

different species in the Santalaceae family including *Santalum lanceolatum* and *Santalum album,* which are not listed in the CITES Appendices for industrial processing.

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ANNEXES

Annex I: Management Plan for Malehi Forest Reserve Located in Kilwa District, Lindi Region, Tanzania

Annex II: Management Plan for Mitarure Forest Reserve Located in Kilwa District, Lindi Region, Tanzania