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Item 9 (a) of the provisional agenda

## **METHODOLOGICAL ISSUES**

### **LAND-USE, LAND-USE CHANGE AND FORESTRY**

#### **Submissions from Parties**

##### **Addendum**

##### **Note by the secretariat**

1. In addition to the submissions included in documents FCCC/SBSTA/2000/MISC.6 and Add.1, two further submissions have been received.
2. In accordance with the procedure for miscellaneous documents, these submissions\* are attached and reproduced in the language in which they were received and without formal editing.

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\* In order to make these submission available on electronic systems, including the World Wide Web, these contributions have been electronically imported, scanned and/or retyped. The secretariat has made every effort to ensure the correct reproduction of the texts submitted.

**FCCC/SBSTA/2000/MISC.6/Add.2**

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**CONTENTS**

<b>Paper No.</b>		<b>Page</b>
1.	<b>SAMOA (on behalf of the Alliance of Small Island States (AOSIS))</b> (Submission received 16 August 2000)	
	<b>Textual proposals associated with land use, land use change and forestry</b>	3
2.	<b>TUVALU</b> (Submission received 16 August 2000)	
	<b>Textual proposals associated with land use, land use change and forestry</b>	8

PAPER NO. 1: SAMOA (ON BEHALF OF THE ALLIANCE OF  
SMALL ISLAND STATES (AOSIS))

**TEXTUAL PROPOSALS ASSOCIATED WITH LAND USE,  
LAND USE CHANGE AND FORESTRY**

Samoa, on behalf of the Alliance of Small Island States, is pleased to have this opportunity to further elaborate on the AOSIS position on land use, land use change and forestry (LULUCF). This submission builds on previous submissions and statements by AOSIS and its spokespersons. It is necessary to also bear in mind that AOSIS believes that a draft decision on this issue is premature, and should not be the basis for discussion in the context of the present work program of the working group under the Subsidiary Body on Scientific and Technical Advice.

AOSIS is of the view that any consideration of textual proposals on land use, land use change and forestry should address at least the following elements:

1. definitional and accounting issues associated with Article 3.3 and 3.4 of the Kyoto Protocol and their relationship to Annex I Assigned Amounts;
2. reporting and inventory requirements under Articles 5 and 7 of the Kyoto Protocol.

It is our belief that decisions on these elements should not be made separately as they are inextricably linked.

This submission addresses these elements and is presented without prejudice to further considerations based on an assessment of the data sets provided by Annex I Parties by August 1. As stated above, it is our belief that the development of decision text is premature as we have yet to review these data sets. Furthermore AOSIS considers that there is a need to discuss how these elements may be linked to other issues covered by draft text on mechanisms and on compliance with the Kyoto Protocol. Therefore the discussion below cannot be seen as exhaustive, but rather is intended to assist the working group in its deliberation and the Secretariat in its preparation for COP6.

AOSIS reserves the right to make further submissions after the group has thoroughly considered the implications of the data sets submitted by Parties on August 1.

**Definitional and Accounting Issues Associated with Article 3.3, Afforestation, Reforestation and Deforestation and their Relationship to Annex I Assigned Amounts:**

**Direct Human Induced:**

The term "direct human induced" in relation to Article 3.3 of the Kyoto Protocol should mean any action directly carried out by humans that results in an activity referred to as afforestation, reforestation and deforestation defined below. Such an action would not include human activities that are not directly associated with afforestation and reforestation activities, for instance, carbon fertilization, nitrogen deposition, and natural regeneration. For the purposes of this definition, a human induced activity that leads to deforestation, whether intentionally or

otherwise would constitute a "direct human induced" activity. Such an activity could include partial or complete land or forest cleaning by fire, pest outbreak, inundation of a forested area by a dam, and forest loss due to salination.

***Comment:***

The difference in defining direct human induced for reforestation and deforestation is aimed at erring on the side of caution as suggested by the IPCC in the Report on Land Use, Land Use Change and Forestry.

**Definition of a Forest:**

A forest for the purpose of determining afforestation, reforestation and deforestation in relation to Article 3.3, should be defined as an area of trees of no less than 0.5 ha in size. Such an area of trees would be defined within the following biome categories: tropical forests, temperate forests, boreal forests, tropical savannahs, temperate grasslands, deserts and semi-deserts, tundra, wetlands.

***Comment:***

The biome categories should be defined by the COP/MOP as an international set of definitions, with guidance from a technical panel of experts. The biome categories will also include a determination of threshold levels for each biome category, most likely based on a canopy cover definition.

Parties should not be given the opportunity to make their own definition on forests as this would unduly overburden the accounting system and make determinations of verifiability cumbersome.

**Afforestation:**

Afforestation should be defined as the conversion of land (which has not had a forest on it for a period of at least 50 years prior to 1990) to forested land. For the purposes of this definition afforestation includes land containing immature forest trees which have grown as a result of a direct human induced activity, so long as it can be shown that these young trees are intended to grow to the threshold canopy cover according to the biome type.

***Comment:***

The inclusion of immature forests allows Parties to account for removals of greenhouse gases (GHG) prior to the possible threshold definition of forests. Should these immature trees not reach the threshold value for determining a forest under the biome definition, any accounting for their GHG removals would be reversed and added to a Party's assigned amount.

**Reforestation:**

Reforestation should be defined as the conversion to land that has supported forest within the past 50 years, but was converted to non-forested land prior to 1990, to forested land. For the purposes of this definition, reforestation includes land containing immature forest trees, which have grown as a result of a direct human induced activity, so long as it can be shown that these young trees are intended to grow to the threshold canopy cover according to the biome type. Reforestation does not include regeneration or revegetation after harvesting.

***Comment:***

This definition ostensibly uses the land use change definition. The requirement that land must be non-forest prior to 1990 overcomes the opportunities for Parties to clear an existing forest, place the land briefly under another land use and then reforest it after 1990. As the IPCC has pointed out in the Special Report on Land Use, Land Use Change and Forestry, under such a scenario a Party would not have the emissions from the initial clearing of the forest accounted for, (except for residue carbon soil emissions during the commitment period), due to the phraseology "carbon stock changes during the commitment period".

**Deforestation:**

Deforestation should be defined as the conversion of forested land to non-forested land. For the purposes of this definition, deforestation includes land in the process of deforestation whereby the land is likely to be cleared within a period of 50 years. For the purposes of this definition, the clearing of a natural forest or thinning of a natural forest for the purposes of replanting with a silvicultural forest, plantation or planted forest, by fire or any other direct human induced activity, shall be deemed to be deforestation.

***Comment:***

As a means of creating an accounting balance between reforestation and deforestation, in relation to the immature trees issue, deforestation should also be considered an incremental process and need not be based on a threshold of total land use change.

**Carbon Stocks Changes for Afforestation and Reforestation:**

Carbon stock changes for the purposes of afforestation and reforestation should include both above ground and below ground carbon. Any emissions due to the creation of an afforestation or reforestation activity, for instance soil disturbance, shall be accounted for. For the purpose of accounting for carbon removals from afforestation and reforestation, Parties may chose to account for only above ground biomass carbon.

***Comment:***

The differential between emissions and removals is aimed at erring on the conservative side as suggested by the IPCC in the Special Report on Land Use, Land Use Change and Forestry.

**Carbon Stock Changes for Deforestation:**

Carbon stock changes for the purposes of deforestation should include emissions from all greenhouse gases listed in Annex A, whether these are from above ground, below ground (including soil carbon) sources or from wetlands.

***Comment:***

For the purposes of determining deforestation all greenhouse gases should be included and should be based on above ground, below ground and aquatic sources associated with wetlands.

**Wood and Other Forest Products:**

Carbon stock in wood and other forest products should not be counted as sinks under ARD activities.

***Comment:***

Because the above definition of ARD activities does not include the harvest/regeneration cycle, accounting should exclude wood or other forest products as sinks.

**Consistency with Sustainable Development, Ecosystem Approach and Social, Cultural and Community Rights:**

Activities associated with afforestation, reforestation and deforestation shall be consistent with and supportive of the principles of sustainable development, the ecosystem approach as defined by the Conference of Parties to the Convention on Biological Diversity and the protection of social, cultural and community rights.

***Comment:***

Management of forests for the purpose of carbon credits should be consistent with other important values of forests.

**Supplemental Information required for annual inventories of 3.3 Activities:**

In accordance with Articles 5 & 7, the IPCC Guidelines should be revised to fully account for ARD activities as defined above.

***Comment:***

AOSIS believes that the current IPCC Guidelines require further elaboration to fully account for the revised definition of ARD activities as described above.

**Definitional and Accounting Issues Associated with Article 3.4, additional human induced activities and their Relationship to Annex I Assigned Amounts:**

**No Additional Activities:**

AOSIS considers it inappropriate to include any additional activities (Art 3.4 activities) for the purpose of adding to, or subtracting from, the assigned amounts for Parties included in Annex I for the first commitment period. An assessment of ARD should be made in the middle of the first commitment period as a means of giving guidance to the consideration of the possible inclusion of additional human induced activities in the second commitment period. Such a consideration shall be based on a review of commitments for the second commitment period.

***Comment:***

Based on the numerous accounting uncertainties associated with afforestation, reforestation and deforestation, it is our belief that no additional activities should be included until there is an adequate assessment of ARD activities during the first commitment period. Additional activities may be considered for the second commitment period subject to a review of commitments by Annex I Parties.

**Biomass Fuel Definitional Issue:**

Biomass fuel projects generally do not fall directly within the definition of afforestation, reforestation and deforestation (Art 3.3) nor under additional activities (Art. 3.4). Subsequently, we believe that biomass fuel projects should be considered to be renewable energy projects and should be accounted for under this category. Due to the fact that they involve a land use activity,

approval of biomass energy projects should be consistent with and supportive of principles of sustainable development and environmental and social protection (as stated earlier).

***Comment:***

Because biomass fuels are neither a source nor a sink, in general terms, they should primarily be considered as energy projects even though they do involve a land use activity. Biomass fuels should be accounted for, including issues associated with leakage and non-permanence, if the biomass is destroyed before it becomes available as a fuel.

**Definitional and Accounting Issues Associated with Article 3.7, additional human induced activities and their Relationship to Annex I Assigned Amounts:**

**Land Use Change:**

Land use change in the context of Art 3.7 should be defined as land subject to afforestation, reforestation and deforestation as defined above for Art 3.3.

***Comment:***

This section should be consistent with the definition of ARD as defined above.

PAPER NO. 2: TUVALU

**TEXTUAL PROPOSALS ASSOCIATED WITH LAND USE,  
LAND USE CHANGE AND FORESTRY**

Tuvalu believes that considerations of textual proposals on Land Use Land Use Change and Forestry (LULUCF) is part of a package of considerations which contain three key elements:

- definitional and accounting issues associated with Article 3.3 and 3.4 of the Kyoto Protocol and their relationship to Annex I Assigned Amounts;
- definitions and accounting requirements associated with Article 3.3 and 3.4 and Joint Implement (Art 6) and at some stage, the Clean Development Mechanism (Art 12)
- reporting and inventory requirements under Articles 5 & 7

It is Tuvalu's belief that decisions on these three elements should be made in concert and not separately as they are inextricably linked.

The textual proposals and discussion below, follow this approach and are presented without prejudice to further considerations based on an assessment of the data sets provided by Annex I Parties by August 1. It is our belief that the development of decision text is premature as we have yet to review the data sets. Furthermore we have yet to see decision text concerning the Kyoto Mechanisms.

**Definitional and Accounting Issues Associated with Article 3.3, Afforestation, Reforestation and Deforestation and their Relationship to Annex I Assigned Amounts:**

**Direct Human Induced:**

The term "direct human induced" in relation to Article 3.3 of the Kyoto Protocol should mean any action directly carried out by humans that results in an activity referred to as afforestation, reforestation and deforestation defined below. Such an action would not include human activities that are not directly associated with afforestation and reforestation activities, for instance, carbon fertilization, nitrogen deposition, and natural regeneration. For the purposes of this definition, a human induced activity that leads to deforestation, whether intentionally or otherwise would constitute a "direct human induced" activity. Such an activity could include a fire, pest outbreak, inundation of a forested area by a dam, and forest loss due to salination.

***Comment:***

The difference in defining direct human induced for reforestation and deforestation is aimed at erring on the side of caution as suggested by the IPCC in the Report on LULUCF.

**Definition of a Forest:**

A forest for the purpose of determining afforestation, reforestation and deforestation in relation to Article 3.3, should be defined as an area of trees of no less than 0.5 ha in size. Such an area of trees would be defined within the following biome categories: tropical forests, temperate forests,



boreal forests, tropical savannahs, temperate grasslands, deserts and semi-deserts, tundra, wetlands.

***Comment:***

The biome categories should be defined by the COP/MOP as an international set of definitions, with guidance from a technical panel of experts. The biome categories will also include a determination of threshold levels for each biome category, most likely based on a canopy cover definition.

Parties should not be given the opportunity to make their own definition on forests as this would unduly overburden the accounting system and make determinations of verifiability cumbersome.

**Afforestation:**

Afforestation should be defined as the conversion of land (which has not had a forest on it for a period of at least 50 years prior to 1990) to forested land. For the purposes of this definition afforestation includes land containing immature forest trees which have grown as a result of a direct human induced activity, so long as it can be shown that these young trees are intended to grow to the threshold canopy cover according to the biome type.

***Comment:***

The inclusion of immature forests allows Parties to account for removals prior to the possible threshold definition of forests. Should these immature trees not reach the threshold value for determining a forest under the biome definition, any accounting for their removals would be reversed and added to a Party's assigned amount.

**Reforestation**

Reforestation should be defined as the conversion to land that has supported forest within the past 50 years, but was converted to non-forested land prior to 1990, to forested land. For the purposes of this definition, reforestation includes land containing immature forest trees, which have grown as a result of a direct human induced activity, so long as it can be shown that these young trees are intended to grow to the threshold canopy cover according to the biome type. Reforestation does not include regeneration or revegetation after harvesting.

***Comment:***

This definition ostensibly uses the land use change definition. The requirement that land must be non-forest prior to 1990 overcomes the opportunities for Parties to clear an existing forest, place the land briefly under another land use and then reforest it after 1990. As the IPCC has pointed out, under this scenario a Party would not have the emissions from the initial deforestation between 1990 and the start of the commitment period accounted for, (except for residue carbon soil emissions during the commitment period), due to the phraseology "carbon stock changes during the commitment period".

**Deforestation:**

Deforestation should be defined as the conversion of forested land to non-forested land. For the purposes of this definition, deforestation includes land in the process of deforestation whereby the land is likely to be cleared within a period of 50 years. For the purposes of this definition,

the clearing of a natural forest or thinning of a natural forest for the purposes of replanting with a silvicultural forest, plantation or planted forest shall be deemed to be deforestation.

***Comment:***

As a means of creating an accounting balance between reforestation and deforestation, in relation to the immature trees issue, deforestation should also be considered an incremental process and need not be based on a threshold of total land use change.

**Carbon Stocks Changes for Afforestation and Reforestation:**

Carbon stock changes for the purposes of afforestation and reforestation should include both above ground and below ground carbon. Any emissions due to the creation of an afforestation or reforestation activity, for instance soil disturbance, shall be accounted for.

For the purpose of accounting for carbon removals from afforestation and reforestation, Parties may choose to account for only above ground biomass carbon.

***Comment:***

The differential between emissions and removals is aimed at erring on the conservative side as suggested by the IPCC.

**Carbon Stock Changes for Deforestation:**

Carbon stock changes for the purposes of deforestation should include emissions from all greenhouse gases listed in Annex A, whether these are from above ground, below ground (including soil carbon) sources or from wetlands.

***Comment:***

For the purposes of determining deforestation all greenhouse gases should be included and should be based on above ground, below ground and aquatic sources associated with wetlands.

**Wood and Other Forest Products:**

Carbon stock in wood and other forest products should not be counted as sinks under ARD activities.

***Comment:***

Because the above definition of ARD activities does not include the harvest/regeneration cycle, accounting should exclude wood or other forest products as sinks.

**Consistency with Sustainable Development, Ecosystem Approach and Social, Cultural and Community Rights**

Activities associated with afforestation, reforestation and deforestation shall be consistent with and supportive of the principles of sustainable development, the ecosystem approach as defined by the Conference of Parties to the Convention on Biological Diversity and the protection of social, cultural and community rights.

***Comment:***

Management of forests for the purpose of carbon credits should be consistent with other important values of forests.

### **Supplemental Information required for annual inventories of 3.3 Activities**

In accordance with Art.s 5 & 7, the IPCC Guidelines should be revised to fully account for ARD activities as defined above.

#### ***Comment:***

We believe that the current IPCC Guidelines require further elaboration to fully account for the revised definition of ARD activities as described above.

### **Definitional and Accounting Issues Associated with Article 3.4, Addition human induced activities and their Relationship to Annex I Assigned Amounts:**

#### **No Additional Activities:**

It is considered inappropriate to include any additional activities (i.e. no Art 3.4 activities) for the purpose of adding to or subtracting from, the assigned amounts for Parties included in Annex I for the first commitment period. Such an assessment should be made in the middle of the first commitment period as a means of giving guidance to the consideration of the possible inclusion of additional human induced activities in the second commitment period. Such a consideration shall be based on a review of commitments by Annex I Parties for the second commitment period.

#### ***Comment:***

Based on the numerous accounting uncertainties associated with afforestation, reforestation and deforestation, it is our belief that no additional activities should be included until there is an adequate assessment of ARD activities during the first commitment period. Additional activities may be considered for the second commitment period subject to a review of commitments by Annex I Parties.

#### **Biomass Fuel Definitional Issue:**

Biomass fuel projects generally do not fall directly within the definition of afforestation, reforestation and deforestation (Art 3.3) nor under additional activities (Art. 3.4). Subsequently, we believe that biomass fuel projects should be considered to be renewable energy projects and should be accounted for under this category. Due to the fact that they involve a land use activity, approval of biomass energy projects should be consistent with and supportive of principles of sustainable development and environmental and social protection (as stated earlier).

#### ***Comment:***

Because biomass fuels are neither a source nor a sink, in general terms, they should primarily be considered as energy projects even though they do involve a land use activity. Subsequently they should be accounted for, including issues associated with leakage and non-permanence, (if the biomass is destroyed before it becomes available as a fuel).

### **Definitional and Accounting Issues Associated with Article 3.7, Addition human induced activities and their Relationship to Annex I Assigned Amounts:**

#### **Land Use Change:**

Land use change in the context of Art 3.7 should be defined as land subject to afforestation, reforestation and deforestation as defined above for Art 3.3.

#### ***Comment:***

This section should be consistent with the definition of ARD as defined above.

### **Definitional and Accounting Issues Associated with Article 6, Joint Implementation**

Art 3.3 activities associated with afforestation, reforestation and deforestation, elaborated upon above, should be the sole basis for project based activities in the land use, land use change and forestry sector for Article 6, Joint Implementation. Approval of ARD activities under Joint Implementation should be subject to the development of appropriate institutional and accounting systems defined below.

No additional activities under Article 3.4 of the Kyoto Protocol should be used for the purpose of adding to or subtracting from, the assigned amounts for Parties included in Annex I for the first commitment period.

#### ***Comment:***

The non-acceptance of Art 3.4 activities is consistent with the previously stated position on this paragraph. Uncertainties associated with Art 3.3 must first be evaluated before any additional activities are included.

### **Institutional Systems Required as a Prerequisite for LULUCF project activities to be included under JI**

#### **Institutional Systems for JI**

Project approval procedures currently being considered for all CDM projects should also apply to Joint Implementation projects. This means that JI activities should be subject to:

- Project validation
- Project monitoring
- Project verification
- Certification of ERUs

In establishing these general institutional accounting requirements, the role of the institutional bodies would be:

#### **Executive Board**

- Determine general baseline methodology
- Oversight over transparency and validating project

### Operational Entities

- Determine specific project baselines

Subsequently all JI projects should be subject to the following criteria:

- the principle of supplementarity
- subject to additionality (financial, investment, technological and environment)
- appropriate eligibility criteria for participation
- appropriate liability

A JI Reference Manual should be developed for JI activities

### ***Comment:***

JI projects should be subject to the same level of scrutiny that is being considered for all CDM projects. The argument that JI projects fall under the general umbrella of Annex I inventories does not justify a lower level of scrutiny, particularly as there are concerns about the potential to exaggerate benefits (in instances where the use of "hot air" may be an issue).

### **Leakage Exclusions:**

JI LULUCF projects subject to potential leakage beyond project baselines would be ineligible for approval. This would include projects where products from the LULUCF may be used for an international market and may not be captured by project baselines.

### ***Comment:***

Leakage is a serious issue in LULUCF activities. The ability to capture leakage depends of the establishment of baselines and to capture the causes of leakage. Forest products that enter and international markets or external trade beyond the project boundary are highly prone to leakage and therefore should be excluded.

### **Non-Permanence Accounting:**

JI projects that fail due to the loss of forests or vegetation due to human induced or non-human induced activities will forfeit all carbon credits accrued. Liability for the loss of credits and means to recoup these losses should be determined by the Working Group on Liability.

### ***Comment:***

The IPCC has identified non-permanence is a serious concern within the LULUCF sector. Full accounting of losses should be made through the first and subsequent commitment periods.

## **Definitional and Accounting Issues Associated with Article 12, the Clean Development Mechanism**

### **CDM and LULUCF not in first commitment period**

Due to concerns about leakage, non-permanence and other accounting and institutional issues associated with LULUCF activities, we believe it is premature to give consideration to including LULUCF activities under the Clean Development Mechanism during the first commitment

period. A review should be undertaken during the first commitment period to consider whether CDM LULUCF project based activities should be included in the second commitment period.

***Comment:***

Despite some efforts to address leakage and non-permanence, there is no guarantee that these accounting problems will be resolved under the CDM. Furthermore there is a general concern that LULUCF activities under the CDM will create a distinct economic disadvantage for renewable energy and energy efficiency projects.

Further work is required to develop effective rules and procedures to eliminate uncertainties and accounting anomalies associated with LULUCF activities and the CDM and to remove the disincentives for renewable energy and energy efficiency projects.

**Contiguous Commitment Periods in relation to Land Use, Land Use Change and Forestry**

**Contiguous Commitment Periods:**

All successive commitment periods should be contiguous with previous commitment periods.

***Comment:***

To ensure accounting consistency, commitment periods should be contiguous.

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