OVERVIEW OF GLOBAL TRENDS IN FSC CERTIFICATES

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This overview is based on a database of all active certificates compiled by the Forest Stewardship Council (FSC) in early 1999, in association with IIED under its project "*Instruments for Sustainable Private Sector Forestry*"[1]. It is a purely factual summary of information and at this stage does not attempt to draw interpretations or conclusions. No statistical tests of significance have been carried out as yet [2]. There were a total of *156 certificates* and an area of *14,992,960 hectares* at the time the database was compiled[3].

1. DISTRIBUTION OF CERTIFICATE NUMBERS AND AREA.

1.1. Geographical distributions

Table 1a and 1 b show that in both cases four countries hold the majority of certificates and certified area (58% of certificates and 85% of the total certified area). Sweden and the USA are important both in terms of numbers and area, Sweden having 52% of the global certified area in 14% of the certificates. Zambia is significant in terms of area but it is important to note that this is in a single certificate. All of Poland's certified area is in state forests.

Table 1a. Top 4 Countries by number of certificates

	No. Certificates	*% of total certificates*	*Area (ha) of certificates*	*% of total area certified*
USA	43	28	1,454,199	10
Sweden	21	14	7,790,690	52
UK	14	9	122,268	1
RSA	11	7	493,981	3
Total	*89*	*58*	*9,861,138*	*66*

Table 1b. Top 4 Countries by area (ha) certified

	Area of certificates	*% of total area certified*	*No. Certificates*	*% of total certificates*
Sweden	7,790,690	52	21	14
Poland	2,236.076	15	5	3
USA	1,454,199	10	43	28
Zambia	1,273,700	8	1	1
Total	*12,754,665*	*85*	*70*	*45*

Only 34% of certificate numbers and 20% of the certified area is in developing countries, as shown in Table 2. Of the 20% certified area, 8% of it is in one certificate in Zambia. The average area of certificates in developing countries is about half that in developed countries, despite this average being increased by the single large certificate in Zambia.

1 This project is funded by the UK's Department for International Development (DFID) and the EC's DGVIII

2 FSC have observed that the low number of certificates and their distribution are currently not adequate for statistically significant conclusions (FSC 1999 *Improvements in Forest Management Due to Certification*).

3 The database was received from FSC in January 1999. SCA in Sweden was also certified early in 1999, adding a significant 2.3 million ha to the total. This has been included in the global distribution data here.

It may be worth noting that volume production may not correlate directly with either numbers or area of certificates, but production data was not consistently available from the database.

Table 2. "The north-south divide"

	No. Certificates	*% of total certificates*	*Area (ha) of certificates*	*% of total area certified*	*Average area (ha)*	*Min-Max area (ha)*
"North" - developed countries	103	66	11,986,229	80	116,371	8 - 2.3M
"South" - developing countries	53	34	3,006,731	20	56,730	23 - 1,273,700
Total	*156*	*100*	*14,992,960*	*100*		

At the regional level (Figures 1a and 1b) it can be seen that North America and Europe are the dominant participants in certification. Europe is especially dominant in terms of area, due largely to the huge area certified in Sweden[4].

Figure 1a. Regional distribution of certificate numbers.

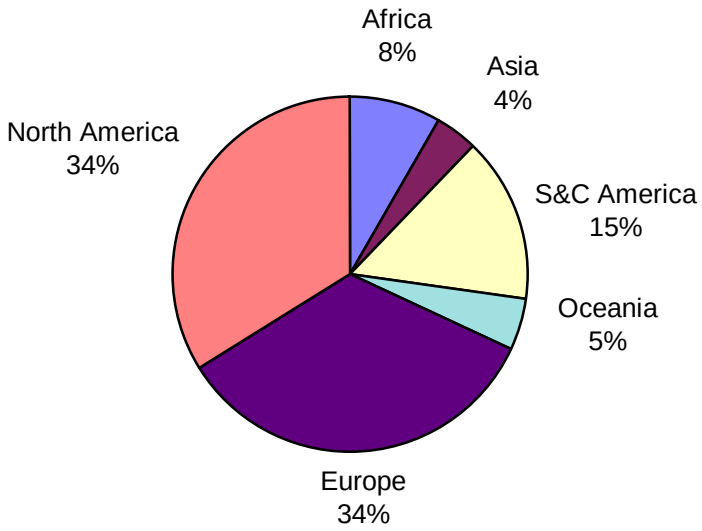
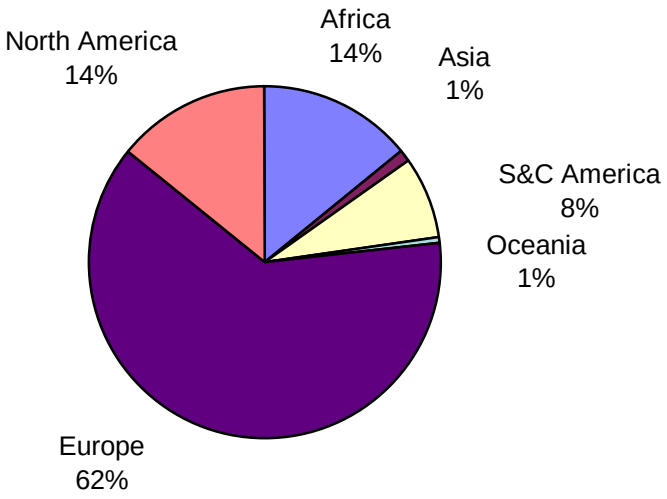


Figure 1b. Regional distribution of certified area.

4 Part of the reason why Sweden features so dominantly may be because the national working group has produced a set of National Standards. The basis of a local scheme makes certification easier and more assured. In the absence of National Standards certifiers have to prepare their own. This is a time consuming process which has militated against certification in a number of countries as the client has had to bear the cost of the certifier preparing "interim" local standards (Jim Sandom, pers.com).



1.2. Enterprise types

Certified enterprises can be divided into four main categories[5]:

- *Community*: Communal, Group, Resource Manager
- *State*: Government, County, Federal, State, Municipal.
- *Industrial*: Private/corporate, mostly over 1000ha.
- *Private*: Non-industrial, small

An additional category has been added to accomodate the Zambian enterprise, which, whilst on state land, is donor funded and managed for community development:

- *Joint*: Donor funded for community development, state supported[6].

Distributions of certificates in each are shown in table 3. Industrial enterprises account for the highest number of certificates (35%) and by far the largest proportion of area (66%). This is a consequence of industrial enterprises being predominantly large, with 81% over 10 000 ha, as shown in figure 2.

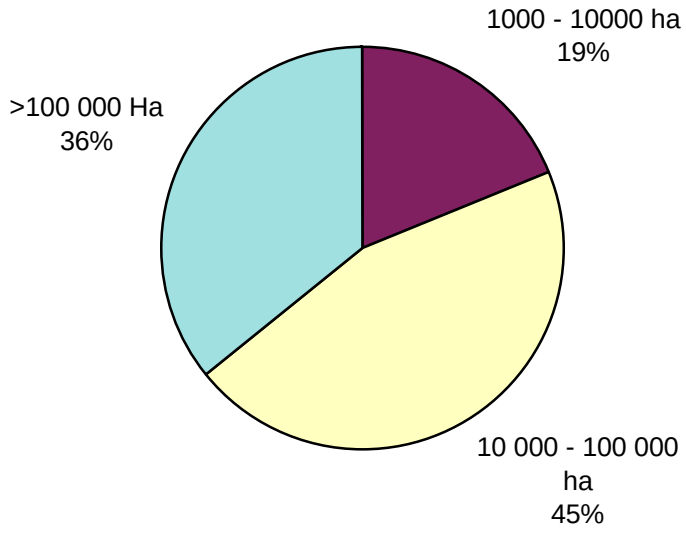
Table 3. Distribution of certificates and area certified between enterprise types.

	No. Certificates	*% of total certificates*	*Area of certificates*	*% of total area certified*	*Average area (ha)*	*Min - Max area (ha)*
Community:	39	25	365, 680	3	9,376	
State:	31	20	3,238,908	22	104,481	
Joint:	1	<1	1,273,700	8	1,273,700	n.a.
Industrial:	54	35	9,941,994	66	184,111	
Private:	31	19	122,678	1	3,957	
Total	*156*	*100*	*14,992,960*	*100*		

5 Based on FSC's database entries.

6 It should be noted that the Zambian enterprise is given its own category (joint) here despite being classified by FSC as a state enterprise, as it is donor funded and managed for community development.

Figure 2. Industrial enterprises: numbers of certificates in each size class.



1.3. Certifiers

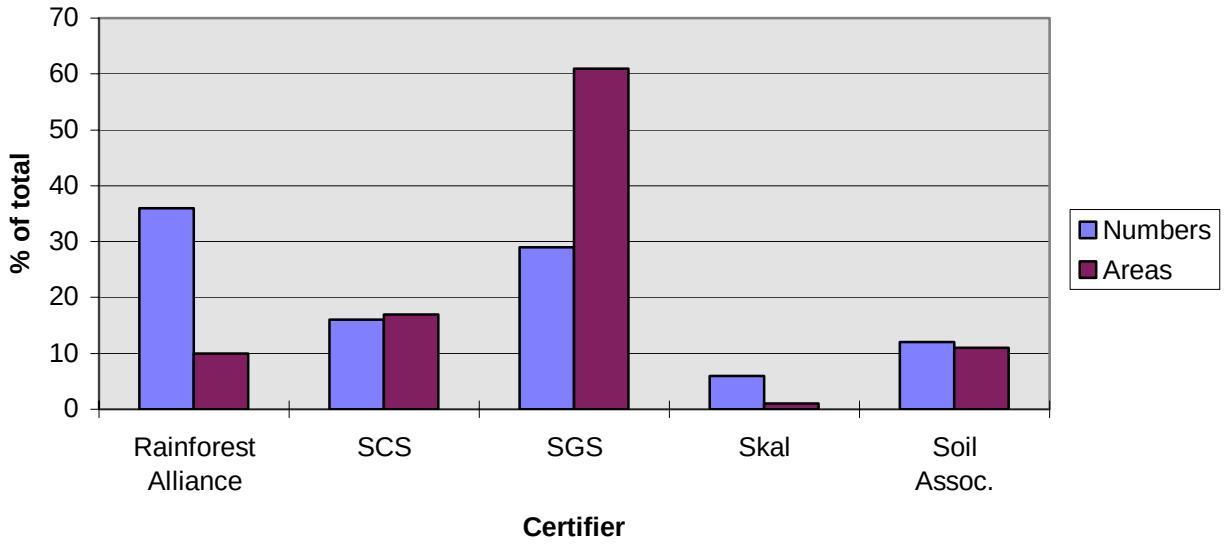
Six certifiers are currently operating. A summary of their current certificates is given in Table 4, and their current shares of certificates are shown in figure 3. Rainforest Alliance's Smartwood programme has the highest number of certificates, whilst SGS Qualifor has by far the greatest area share. Rainforest Alliance and Soil Association have certified a greater proportion of small and community enterprises, whilst SGS and SCS have more large, industrial enterprises. Skal has certified predominantly state enterprises (municipal). IMO has only recently been accredited and has only 1 certificate so far.

Table 4. Distribution of certificates between certifiers.

Certifier	*No. certificates*	*% of total certificates*	*Total area certified*	*Average area of certificates*	*Industrial:State:Non-industrial:Community*
Rainforest Alliance	56	36	1,482,992	26,482	9 : 5 : 19 : 21
SCS	25	16	2,639,610	105,584	18 : 1 : 1 : 5
SGS	46	29	9,208,622	200,187	24 : 12 : 0 : 10
Skal	9	6	57,577	6,397	0 : 8 : 1 : 0
Soil Assocn	19	12	1,602,064	84,319	3 : 6 : 9 : 1
IMO[7]	1	1	2095	2095	Private (non-industrial)

Figure 3. Numbers and areas of enterprises certified by each certifier.

7 The IMO certificate was not included in further analysis, as the record was too recently added to the database.



1.4. Forest Types.

Forest type can be divided into several categories: by *biom*e (boreal - tropical), by whether it is *natural forest or plantation*, or by dominant *species type* (broadleaved or conifers). Tables 5a and 5b show the numbers and area of certificates in each, table 5c shows average, minimum and maximum areas for each type.

Table 5a. Numbers of certificates in each forest type.

	Number	% of total		Number	% of total		Number	% of total
Boreal and temperate	111	71	Natural, semi-natural	84	53	Broadleaf	19	12
						Conifer	65	42
			Plantation	27	18	Broadleaf	10	6
						Conifer	17	11
Tropical and sub-tropical	45	29	Natural, semi-natural	23	15	Broadleaf	16	10
						Conifer	7	5
			Plantation	22	14	Broadleaf	20	13
						Conifer	2	1

Table 5b. Area certified in each forest type.

	Area (ha)	% of total		Area (ha)	% of total		Area (ha)	% of total
Boreal and temperate	12,531,934	83	Natural, semi-natural	12,020,100	80	Broadleaf	1,019,974	7
						Conifer	11,000,126	73
			Plantation	511,834	3	Broadleaf	29,167	<1
						Conifer	482,667	3
Tropical and sub-tropical	2,461,026	17	Natural, semi-natural	1,948,015	13	Broadleaf	1,752,738	12
						Conifer	195,277	1
			Plantation	513,011	4	Broadleaf	230,088	2
						Conifer	282,923	2

Table 5c. Average and range of area of certificates of different forest types.

Area (ha)	*Boreal & temperate*	*Tropical & subtropical*	*Natural & semi-natural*	*Plantation*	*Broadleaf*	*Conifer*
Average	112,900	54,689	130,543	20,915	46,645	131,439
Minimum	8	23	8	23	13	8
Maximum	2.3M	1,273,700	2.3M	218,545	1,273,700	2.3M

Nearly three-quarters of certificates are in boreal and temperate regions, nearly two-thirds of which are natural or semi-natural conifer forests (42% of certificates globally). Natural and semi-natural forests make up over two-thirds of all certificates in total. Globally, conifers dominate in 59% of certificates, broadleaves in 41%.

In terms of area, the trends are further exaggerated. The boreal and temperate regions dominate more, with 83% of the area certified. Nearly 90% of this is in natural and semi-natural forests, making up almost three-quarters of the global certified area. Plantations make up only 7% of the certified area, and broadleaves only 21%.

2. CONDITIONS

The FSC database was also used to analyse trends in the conditions placed on enterprises by certifiers under the certificate issued[8]. As FSC has noted, inconsistent information from certifiers makes trends drawn in this section tentative. However, monitoring the emergence of apparent trends may be useful in the development of certification systems.

Conditions are placed on certificates where the certifiers note that some final management changes are required in order that the enterprise will meet FSC Principles and Criteria (P&Cs). Not all certifiers use the same standard, criteria and indicators, so the FSC P&Cs cannot be directly applied as a basis for certification, unless there is a an FSC endorsed National Standard, such as in the UK or Sweden[9]. Certifiers specific corrective action requests and conditions have been grouped inthe FSC database under the nearest FSC principle or criteria.

The 15 most common conditions applied globally are shown in figure 4. Criteria 7.1, 8.2 and most of principle 6 regarding environmental impacts of the FSC's Principles and Criteria are notably problematic.

Five conditions are shown to be applied to over one-third of all certificates. The details of these conditions are given in table 6. (Details of all conditions can be found in the FSC website). It is notable that the emphasis appears to be on documentation, monitoring and environmental issues rather than social and silvicultural issues.

8 It should be noted that the database at this stage gives no indication of whether the conditions included relate to initial certification assessment (which might be expected to raise a high number of conditions), or subsequent annual checks or re-certifications. It has been assumed that the range included in the database will balance out, but the trends should be examined with some caution.

9 Jim Sandom, pers.comm.

Figure 4. The 15 most common conditions applied to certificates.

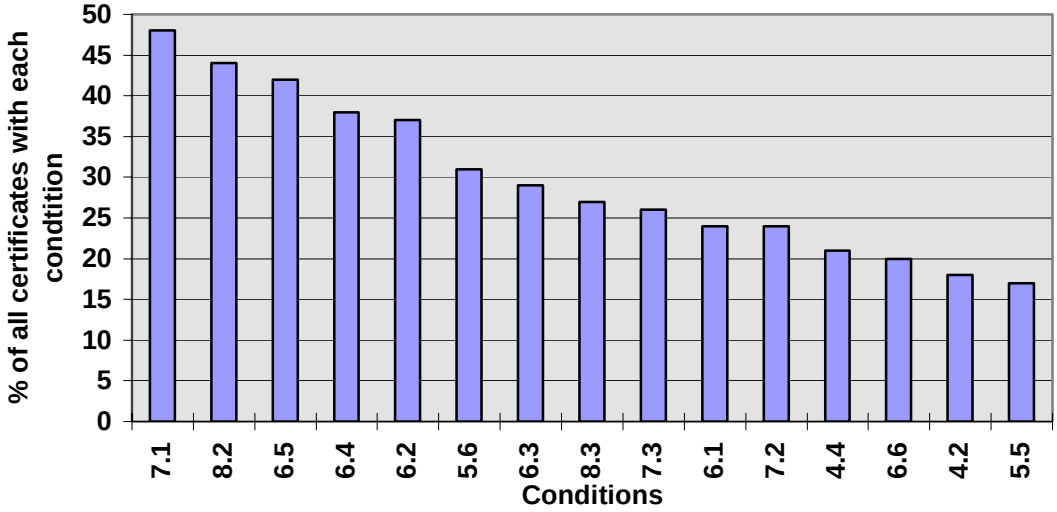


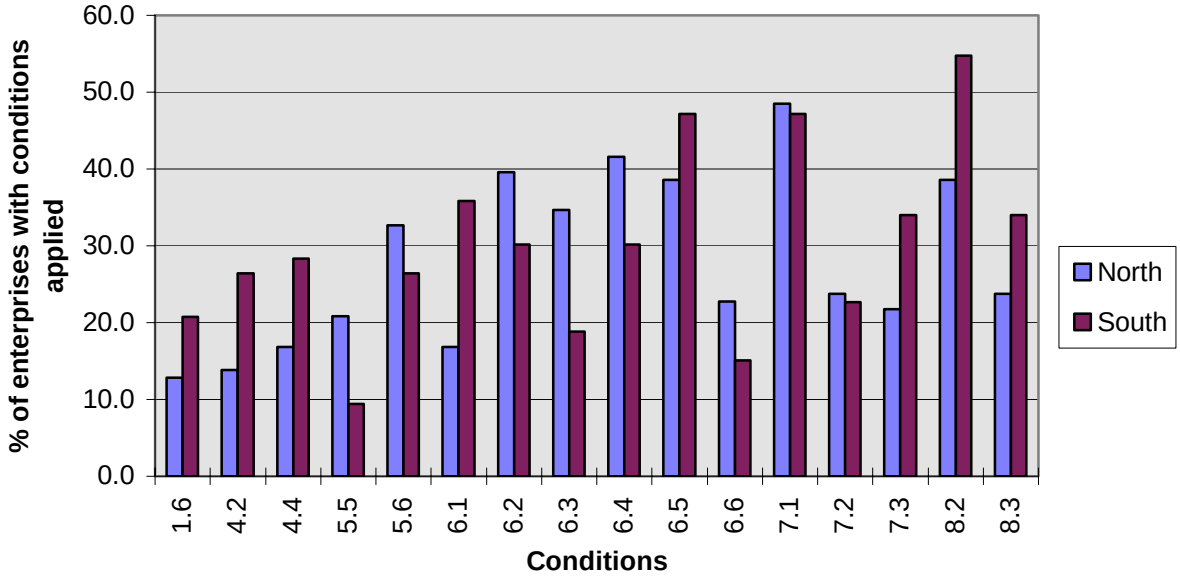
Table 6. The 5 Most common conditions placed on certificates.

P&C No.	% of all certificates	Details of unfulfilled requirements:
7.1	48%	*Management plan and supporting documents*: incl. management objectives, forest resource description, silvicultural/management system, harvest rate, species selection, monitoring forest growth, environmental safeguards,protection, maps, harvesting techniques.
8.2	44%	Monitoring and assessment: *Forest management should include research and data collection to monitor* yield, growth, regeneration, flora and fauna, environmental and social impacts of harvesting, costs, productivity and efficiency.
6.5	42%	Environmental impact: *Written guidelines should be prepared and implemented* to: control erosion; minimize forest damage during harvesting, road construction, etc; protect water resources.
6.4	38%	Environmental impact: *Representative samples of existing ecosystems within the landscape shall be protected* in their natural state and recorded on maps, appropriate to the scale and intensity of operations and the uniqueness of affected resources.
6.2	37%	Environmental impact: *Safeguards shall exist which protect rare, threatened and endangered species and their habitats*. Conservation zones and protection areas shall be established, appropriate to the scale and intensity of operations and the uniqueness of affected resources

2.1. Geograhical trends

Overall, the average number of conditions applied to each certificate is higher in developing countries (7.5), compared to developed countries (5.5). Figure 5 shows the most common conditions applied to enterprises in developed and developing countries.

Figure 5. Most common conditions applied in developed (north) and developing (south) countries.



Further trends are very difficult to discern and should be treated with caution at this stage. However, continued monitoring of emerging trends is crucial.

Developing countries appear to have greater difficulty than developed country enterprises with conditions relating to the management system, monitoring and social aspects:

- long-term commitment to FSC P&Cs (1.6),
- health and safety (4.2),
- social impact evaluations and local consultation (4.4),
- environmental impact assessment (6.1),
- preparing written guidelines for environmental impacts (6.5),
- training of employees (7.3),
- including data collection for monitoring in management (8.2),
- documentation for monitoring (8.3).

Developed country enterprises show more difficulty than developed country enterprises with conditions relating to environmental performance requirements:

- Recognizing values of forest services and resources such as watersheds and fisheries (5.5)
- Maintaining ecological functions and values, including genetic diversity, regeneration and natural cycles (6.3)
- Protecting representative samples of ecosystems (6.4)

At the regional level patterns are less clear, but table 7 shows that South and Central American and African enterprises have the highest number of conditions, whilst European ones have the lowest. It also shows which conditions are relatively problematic for each region compared to other regions.

Table 7. Emerging regional trends in conditions on certificates.

	Average number of	Problematic conditions (more than 30% of

	conditions per enterprise	enterprises)
S&C America	8.5	4.4, 5.1, 5.6, 6.2, .4, 6.5, 7.1, 7.3, 8.2, 8.3
Africa	8.2	1.6, 4.2, 4.4, 6.1, 6.5, 7.1, 7.2, 7.3, 7.4, 8.2, 8.3, 8.5
N. America	6.7	5.5, 5.6, 6.2, 6.3, 6.4, 6.5, 7.1, 8.2, 8.3
Oceania*[10]	6.1	6.1, 6.2, 6.5, 7.1
Asia*	5	1.6, 6.1, 6.2, 6.4, 6.5, 7.1, 7.2, 7.3, 8.3
Europe	4.5	6.4, 7.1

2.2. Enterprise type trends

Community enterprises have both the highest average number of conditions per certificate and the highest number of problematic conditions (Table 8). State enterprises have the least of both.

Table 8. Emerging enterprise type trends inconditions on certificates

Enterprise type:	Average number of conditions per enterprise	Problematic conditions (more than 30% of enterprises)
Community	7.3	5.6, 6.2, 6.3, 6.4, 6.5, 7.1, 7.2, 7.3, 8.2, 8.3
Industrial	6.9	6.1, 6.2, 6.4, 6.5, 7.3, 8.2
Non-industrial	5.1	5.5, 5.6, 6.5, 7.1, 8.2
State	4.8	6.2, 7.1, 7.2

Commonly problematic conditions (ie in 3 out of the 4 enterprise types) are: 6.2, 6.5, 7.1, and 8.2. Community operations appear to have greater problems than others with Principle 7, relating to management plans and documentation.

2.3. Certifier trends

Certifiers appear to vary in their patterns of applying conditions to certificates. A crudely numerical analysis of conditions is not appropriate. It is crucial to note that any differences may result largely from differences in approaches used by certifiers and availability of National Standards. For example, certifiers may work with clients prior to certification to prepare them for FSC certification and therefore reduce the conditions applied during the certification process itself. Similarly they may work with clients who are better prepared to begin with, or have been certified through a non-FSC system previously. Some certifiers may work more in areas where National Standards are available, where national working groups have produced a set of national standards which makes certification easier and more assured.

It should also be noted that certifiers vary in the terminology and reporting methods used, and in the standard length of certificates issued (eg. Soil Association certificates are valid for only one year).

2.4. Forest type trends

10 *Asia and Oceania have very few certificates so far, making trend comparisons unreliable.

The trends in conditions placed on enterprises in different forest types, as shown in Table 9, are not very clear. However, tropical and sub-tropical enterprises have a higher average number of conditions per enterprise than boreal/temperate enterprises, and there are only 2 conditions applied on more than 30% of plantations.

Table 9. Emerging forest type trends in condition on certificates.

Forest Type:	Average number of conditions per enterprise	Problematic conditions (more than 30% of enterprises)
Boreal & temperate	5.8	6.2, 6.3, 6.4, 6.5, 7.1, 8.2
Tropical & subtropical	7.1	6.5, 7.1, 7.3, 8.2, 8.3
Natural and semi-natural	6.3	6.2, 6.3, 6.4, 6.5, 7.1, 8.2
Plantation	6.1	7.1, 8.2
Broadleaf	5.9	5.6, 6.5, 7.1, 8.2
Conifer	6.4	6.2, 6.3, 6.4, 6.5., 7.1, 8.2