

Preliminary results of an international survey on the use of methyl bromide for quarantine and pre-shipment

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Purpose of the survey

11th MOP instructed the TEAP

“to estimate the volume of methyl bromide that would be replaced by the implementation of technically and economically feasible alternatives for quarantine and pre-shipment, reported by commodity and/or application”

Methods

- Survey form
 - specified 14 commodity categories
 - quantity used, reason for treatment, export destination, legislative basis for treatment
 - pests treated, availability of alternatives, reasons not used or not available
- Posted on UNEP website, plus letter from Ozone Secretariat to Parties
- 10 weeks for Parties to respond
- Data sought for 2002 calendar year

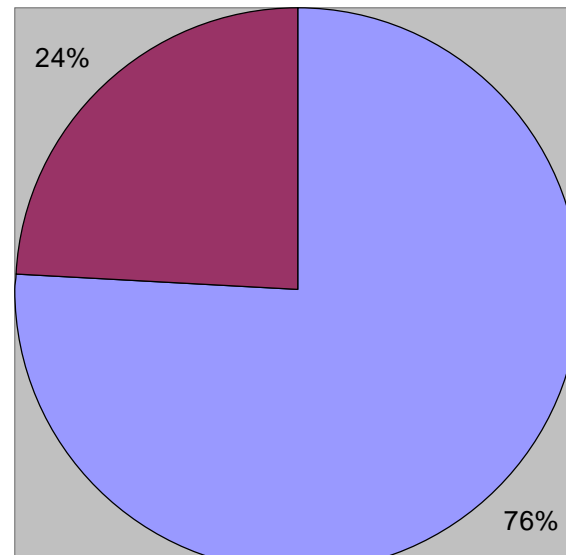
Responding parties

- 42 of 188 Parties responded to the survey
 - Note that only 66 Parties reported use of MB for any purpose in 1999¹
- 20 Article 5 countries, 22 non-Article 5
- 15 Parties advised that no MB was used for QPS

QPS use of MB

- Total reported QPS use of MB – 1611 tonnes
- Article 5 Parties – 1,221 tonnes
- Non-Article 5 – 390 tonnes

QPS MB (%) used by Article 5 vs. non-Article 5 countries

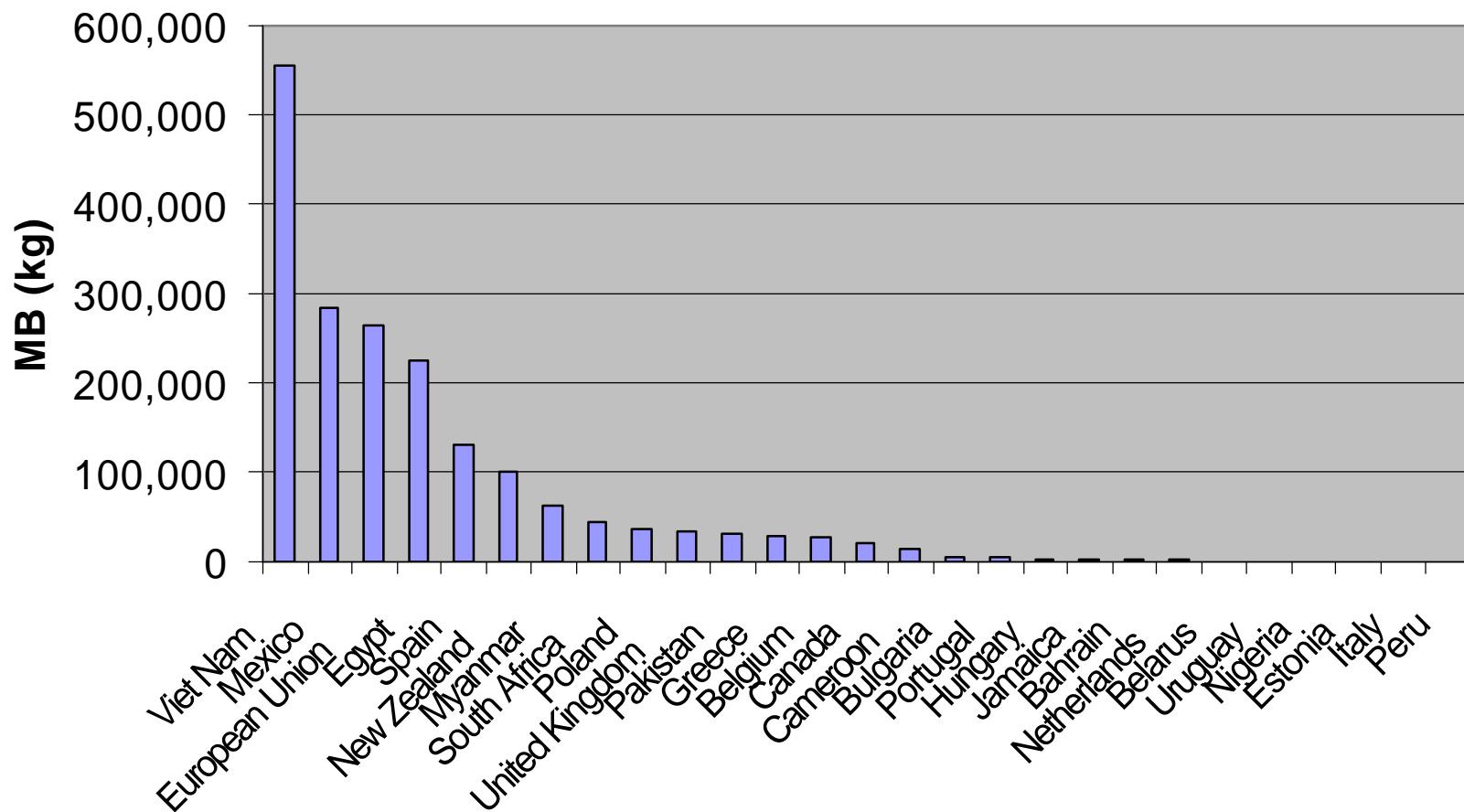


■ Article 5 Parties

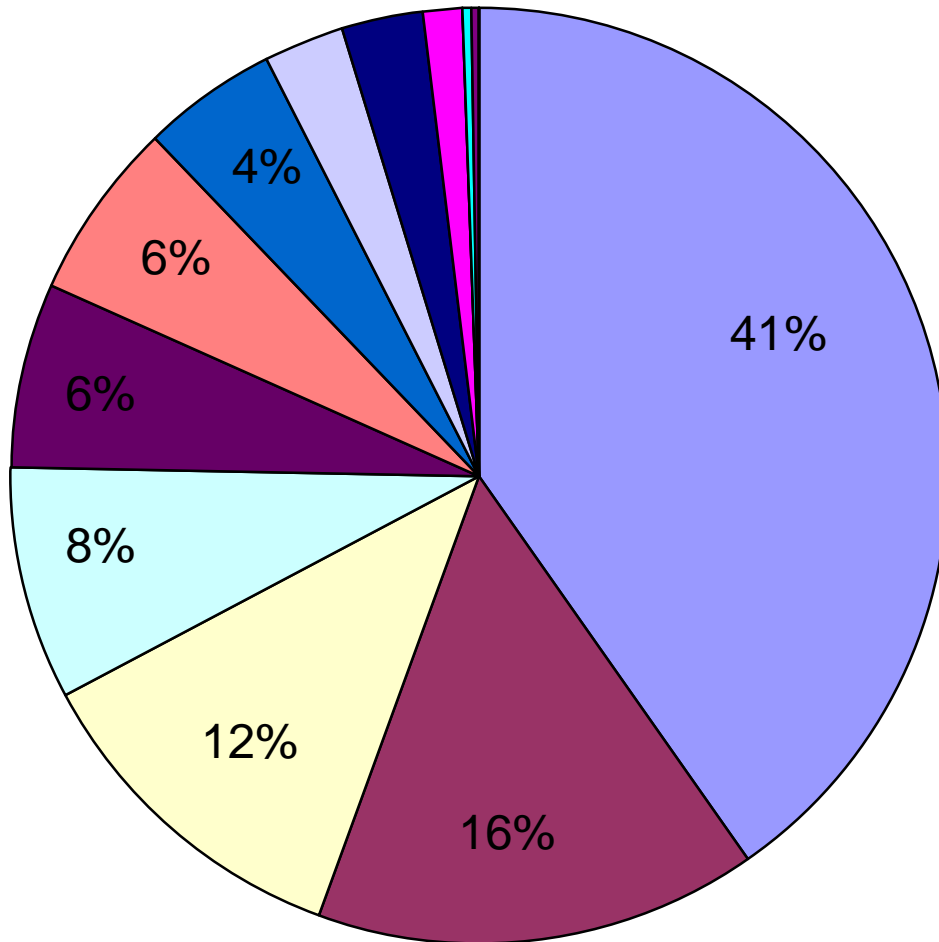
■ Non-Article 5 Parties

Quantity of QPS MB by country

Total QPS MB by country (kg)

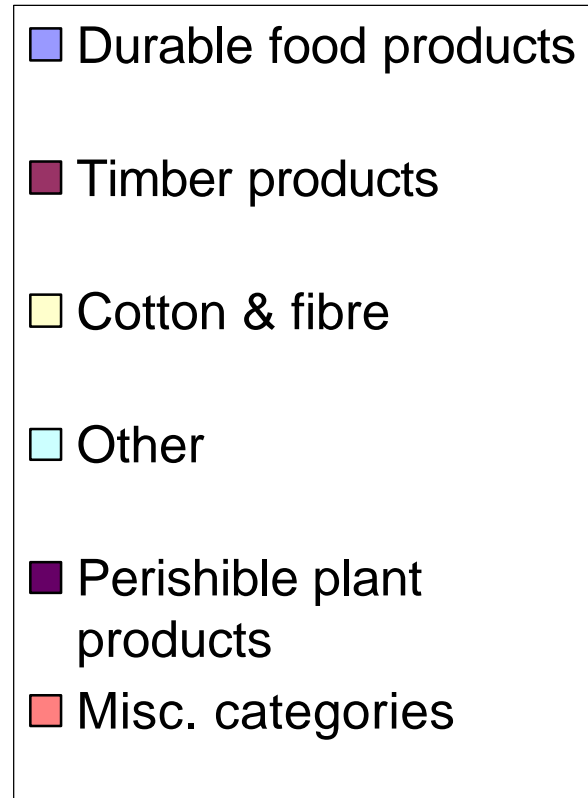
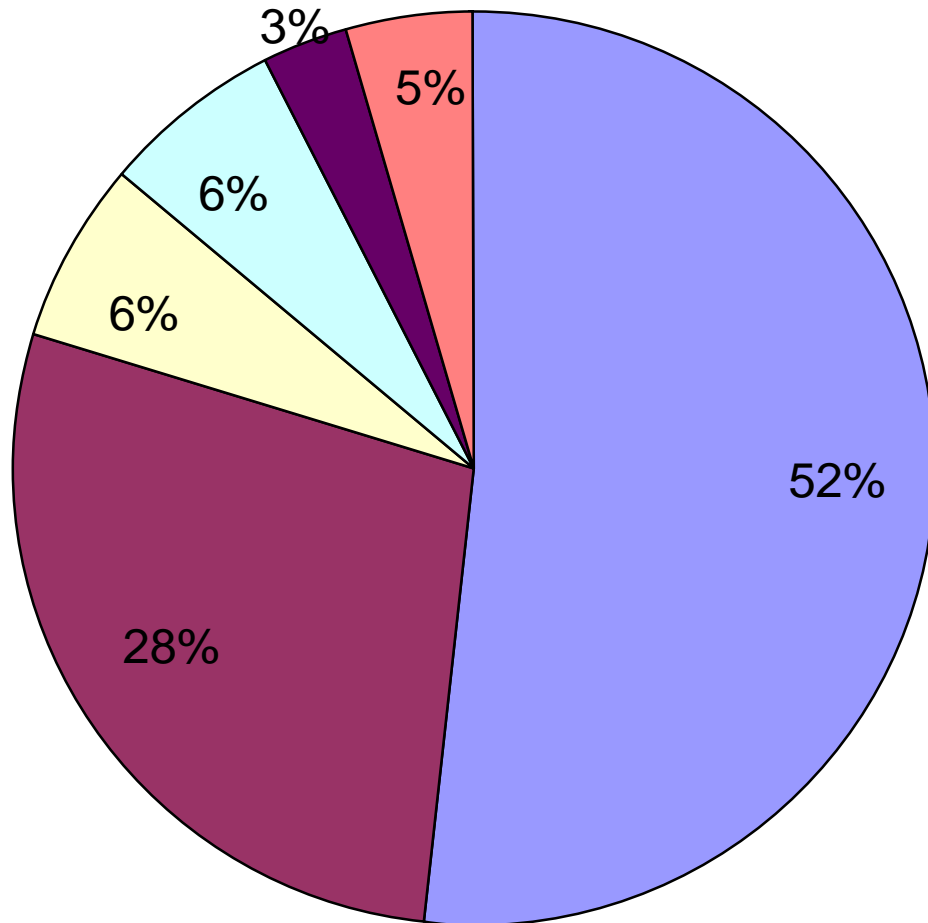


MB used for QPS in commodity groups surveyed

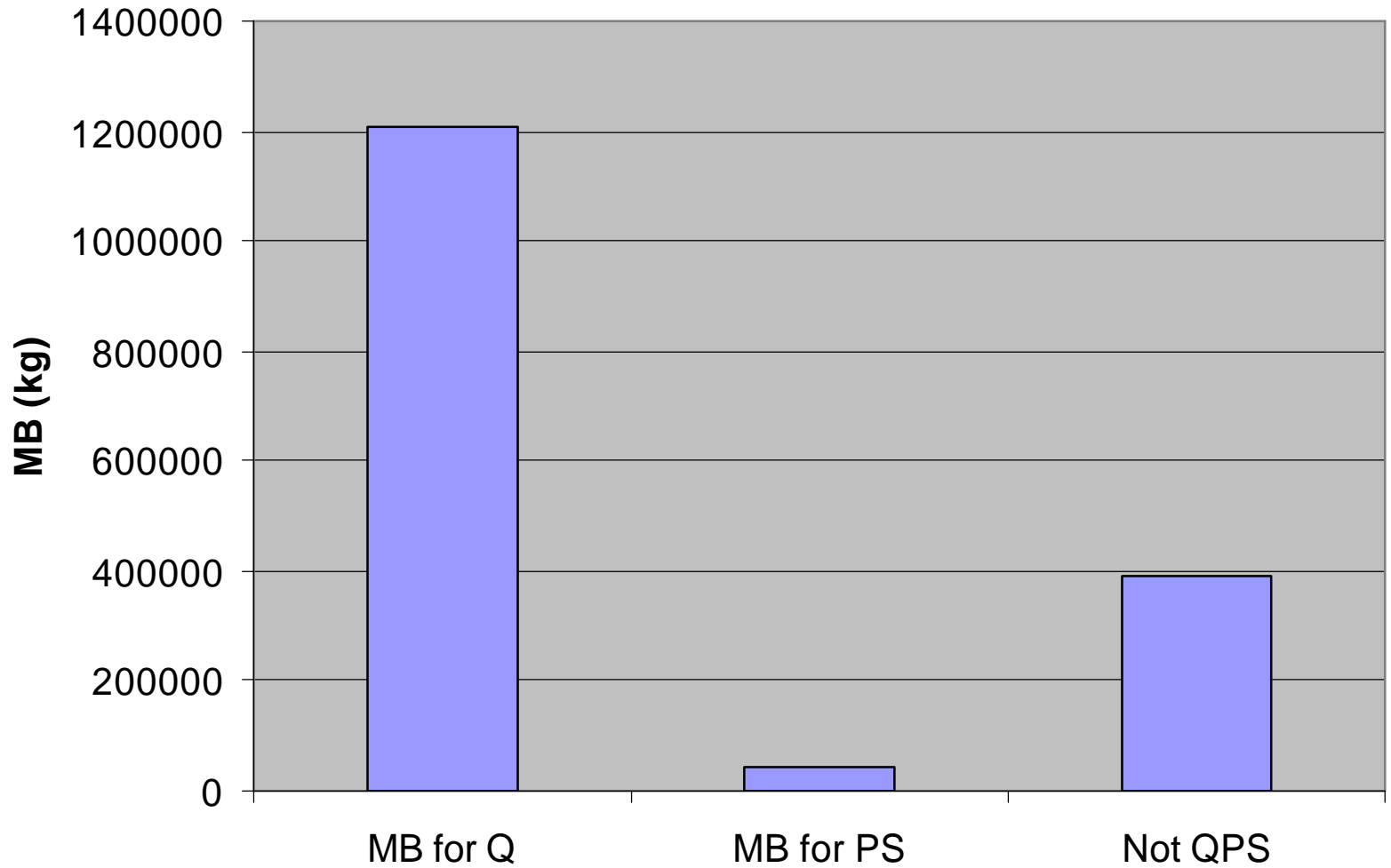


- Grain and cereals
- Wooden packaging
- Dried foodstuffs
- Wood
- Cotton and fibre
- Other
- Whole logs
- Fresh fruit and vegetables
- Equipment
- Personal effects
- Bulbs, corms etc
- Cut flowers
- Hay, animal fodder
- Seeds
- Nursery stock

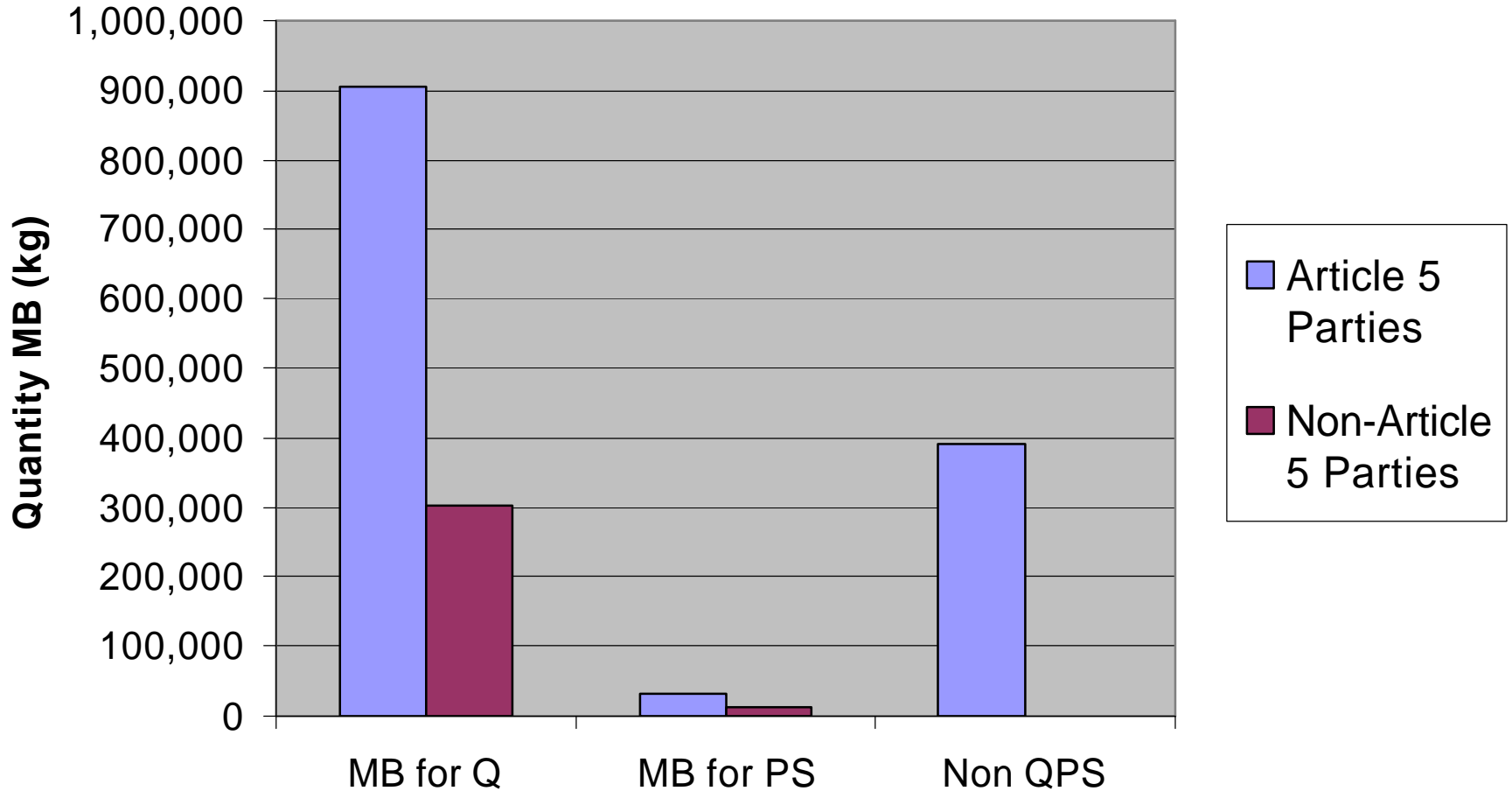
Main uses of MB for QPS



Use of MB for Q, PS, and non-QPS

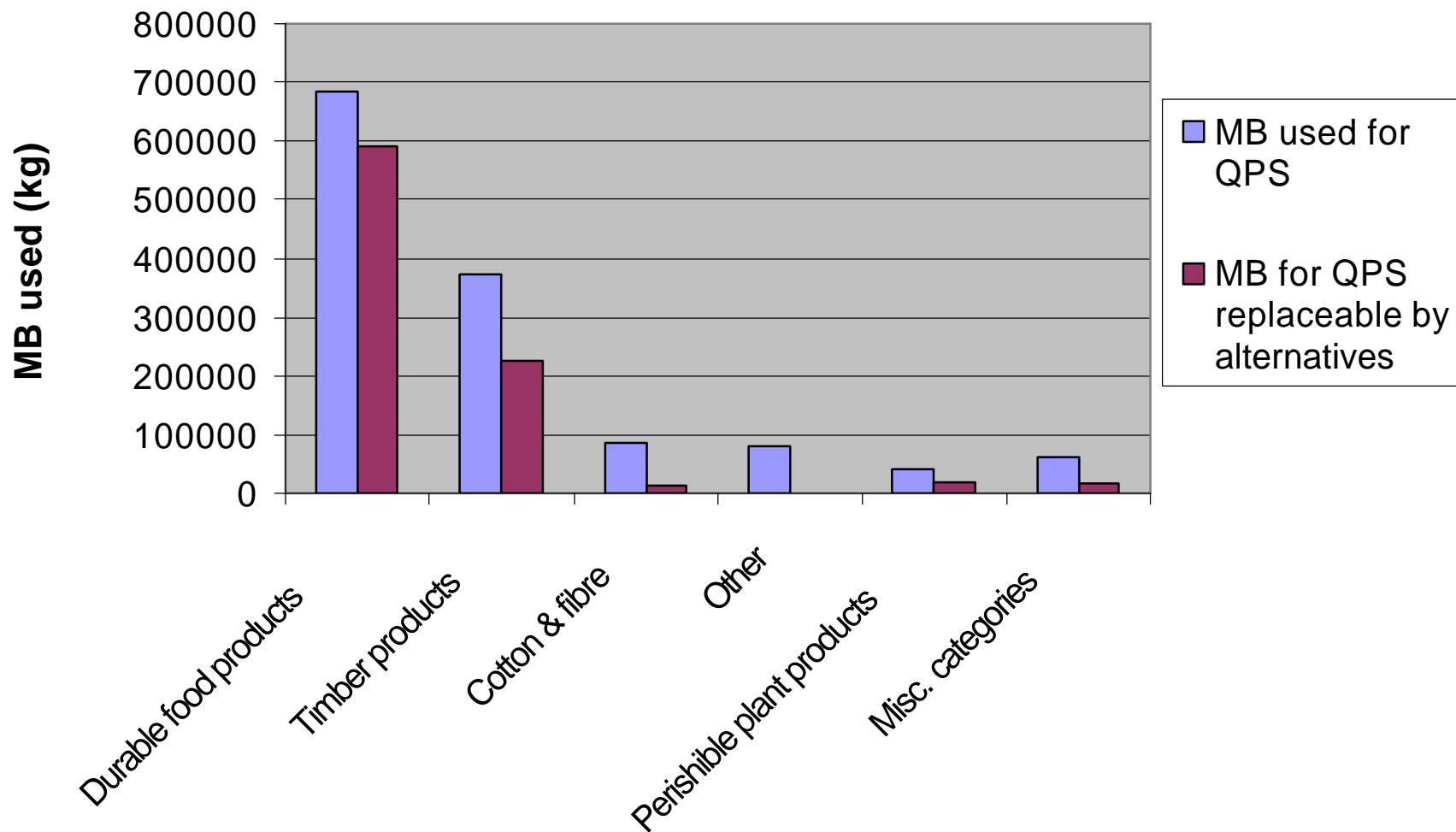


Use of MB for Q vs. PS, and non-QPS for non-Article 5 and Article 5 countries



QPS Alternatives

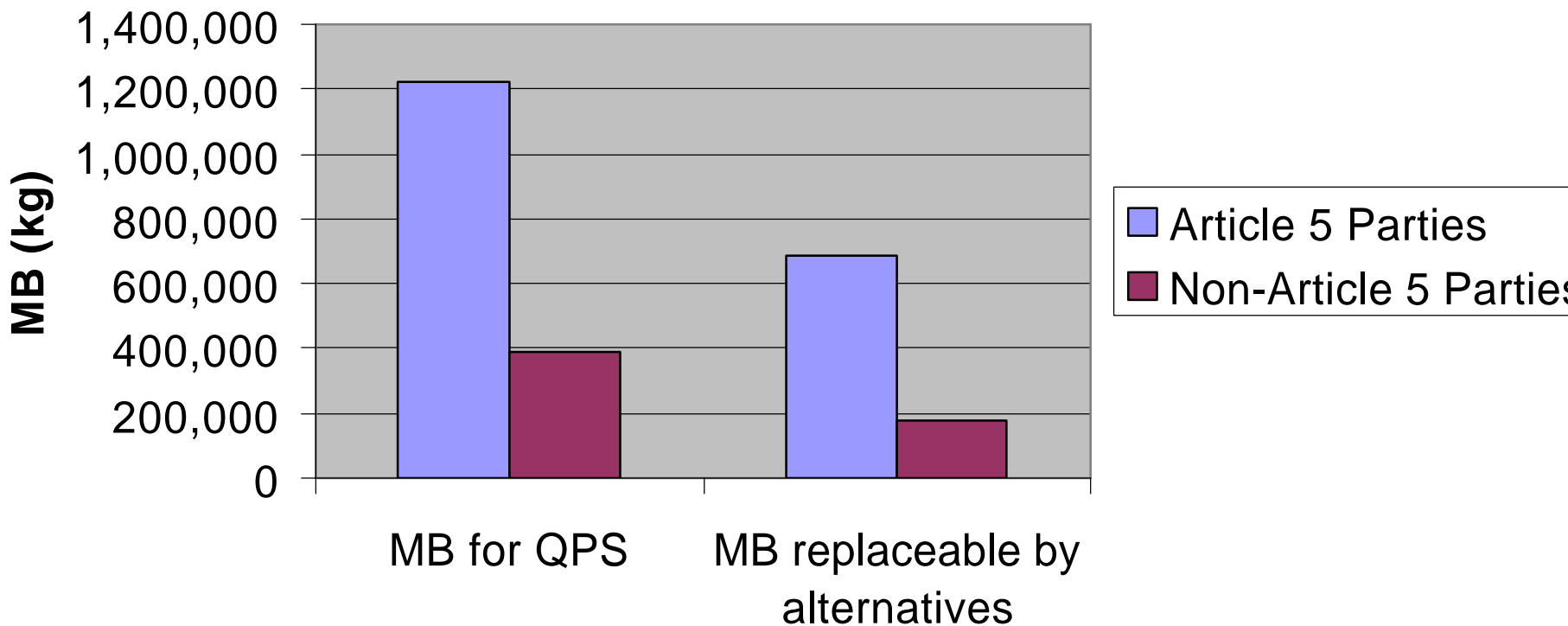
Availability of alternatives for major QPS uses of MB



Quantity of MB replaceable

- 65% of QPS MB could be replaced
- 61% of total QPS MB could be replaced by available alternatives for just two categories:
 - 44.5% for durable food products
 - 16.9% for timber products

QPS MB used by Article 5 / non-Article 5 Parties and quantities replaceable by alternatives



Alternatives

- Durable food products
 - phosphine, aluminium phosphide, magnesium phosphide, hot water treatment, heat treatment, controlled atmosphere, and combination hot water and dry air
- Timber products
 - heat treatment, heat + low O₂, phosphine, aluminium phosphide, ethyl formate, sulfuryl fluoride, debarking, insecticides, pest free areas, and inspection

Alternatives cont.

- Cotton & fibre
 - phosphine
- Perishable plant products
 - pyrethroids, cold treatment, hot water treatment, and alternative phytosanitary procedures (pre-clearance programmes, systems approach, pest free areas, inspection)
 - no “on-arrival” treatment alternatives identified by responding Parties

Reasons alternatives not adopted

- Cost
- Location of alternative treatment facilities (few & far between)
- Lack of application to packed shipping containers
- Non-acceptance by importing countries

Pests treated

- Refer Table 3

Summary

- Survey reports on 15% of the QPS MB estimated by MBTOC in 2000
- 1611 tonnes MB used for QPS
- 862 tonnes replaceable by available alternatives
 - but not implemented due to cost, location, lack of acceptance
- Small sample – however results consistent with other studies
 - Major uses are durable food products and timber products
 - Responding parties themselves identified that alternatives are commercially available, but not fully implemented

Issues for the Parties

- Can QPS alternatives be economically implemented?
- Use of MB for wood packaging material likely to increase
- Some Parties unaware of the scope and definition of the exemption – 390 tonnes reported as QPS is not QPS
- Prophylactic treatments common, and possibly unnecessary
- How to obtain better data?

Acknowledgements

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