



Access and Benefit Sharing Key Points for Policy-Makers

THE COSMETICS INDUSTRY

THE ABS
CAPACITY
DEVELOPMENT
INITIATIVE



People and Plants
international



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November 2015

SUMMARY OF KEY POINTS

MARKETS, COMPANIES AND PRODUCTS

-  Although growing, natural ingredients represent only 7% of the overall market. Amounts of natural ingredients used in products range from extremely small to substantial for active ingredients that have an effect. Nearly 75% of 'natural' products have only a small amount of natural ingredients, usually incorporated for marketing purposes.
-  Brazil and China are the fastest growing natural personal care markets.
-  Markets for cosmetic products using natural ingredients are growing but remain a small part of the overall cosmetics industry.
-  Revenues of the top ten cosmetic companies amounted to around \$121 billion in 2013.
-  In the natural personal care segment, ten companies represent nearly 50% of total market sales. In 2014 the top five claimed 29% of market share.

TRENDS IN RESEARCH AND DEVELOPMENT

-  Investments and approaches to research and development (R&D) vary enormously.
-  Patents have become an increasingly important part of R&D strategies. Natural ingredients and extracts accounted for 49% of all patent activity in the personal care industry between 1990 and 2009, 34% attributed to plants.
-  Most species mentioned in patents are those long established in the trade, with *Aloe vera* by far the most ubiquitous.

RESEARCH AND MARKET CHANGES

-  Research strategies and markets have changed considerably over the past fifty years, moving towards increased use of cultivated resources, more sophisticated technologies, greater use of certification tools and rising affluence among consumers.
-  Some wild collection occurs for new species, for those used in small amounts, or for wild species with higher levels of active compounds than those cultivated.

ETHICAL AND SUSTAINABLE SOURCING

-  Sustainability and ethical issues have become central to this industry and have considerable marketing value. The extent to which companies embrace these approaches differs depending on their size, markets, brands and philosophies.
-  There is continued reliance on new and exotic ingredients from collections, and through re-invigorating research.
-  ABS requirements and ethical sourcing approaches are gradually being integrated into contracts between companies and suppliers.

USE OF TRADITIONAL KNOWLEDGE

-  There is interest in traditional knowledge for marketing, efficacy, new products and harvesting protocols, alongside increasing consumer interest in 'exotic' ingredients that are natural and indigenous. Knowledge is mostly sourced from existing literature rather than through new investigations.
-  The use of traditional knowledge may also be viewed as a hazard by some companies because of the difficulties of obtaining prior informed consent (PIC), negotiating agreements and identifying knowledge holders.

INDUSTRY AND ABS

-  Discussions about ABS have advanced significantly in this sector in recent years, along with enhanced levels of awareness and engagement.
-  Despite these advances, there remains a great deal of uncertainty and an absence of understanding about ABS, with many companies adopting a 'wait and see' approach.
-  Some companies are beginning to define for themselves ways to integrate ABS into their collecting activities and R&D strategies.
-  Companies still need a great deal of support and guidance to understand and implement ABS measures.

COMMONLY USED PLANT-DERIVED INGREDIENTS



OILS

Castor oil (*Ricinus communis*)
 Jojoba oil (*Simmondsia chinensis*)
 Almond oil (*Prunus dulcis*)
 Sesame oil (*Sesamum indicum*)
 Avocado oil (*Persea americana*)
 Apricot kernel oil (*Prunus armeniaca*)
 Rapeseed oil (*Brassica napus*)
 Linseed oil (*Linum usitatissimum*)
 Sunflower seed oil (*Helianthus annuus*)
 Palm oil (*Elaeis guineensis*)
 Coconut oil (*Cocos nucifera*)

Moisturisers, emollients



ESSENTIAL OILS

Patchouli oil (*Pogostemon cablin*)
 Citronella oil (*Cymbopogon winterianus*)
 Sandalwood oil (*Santalum album*)
 Bergamot oil (*Citrus aurantium*)
 Rosemary oil (*Rosmarinus officinalis*)
 Rose oil (*Rosa damascena*)
 Mint oil (*Mentha piperita*)
 Jasmine oil (*Jasminum officinale*)
 Vetiver oil (*Chrysopogon zizanioides*)

Fragrances



EXTRACTS AND SAPS

Aloe sap (*Aloe vera*)
 Açai fruit extract (*Euterpe oleracea*)
 Baobab fruit extract (*Adansonia digitata*)
 Guarana extract (*Paullinia cupana*)

Moisturisers, emollients



COLOURANTS

Indigo extract (*Indigofera spp*)
 Curcuma extract (*Curcuma spp*)
 Henna extract (*Lawsonia inermis*)
 Marigold extract (*Tagetes spp*)

Colouring



GUMS

Gum arabic (*Acacia spp*)
 Gum tragacanth (*Astragalus spp*)
 Guar gum (*Cyamopsis spp*)
 Locust bean gum (*Ceratonia siliqua*)

Stabilisers, adhesive agents, jelly lubricants, suspending agents, thickeners, binders



FATS AND WAXES

Cocoa butter (*Theobroma cacao*)
 Carnuba wax (*Copernicia prunifera*)
 Candelilla wax (*Euphorbia spp*)

Moisturisers, emulsifiers

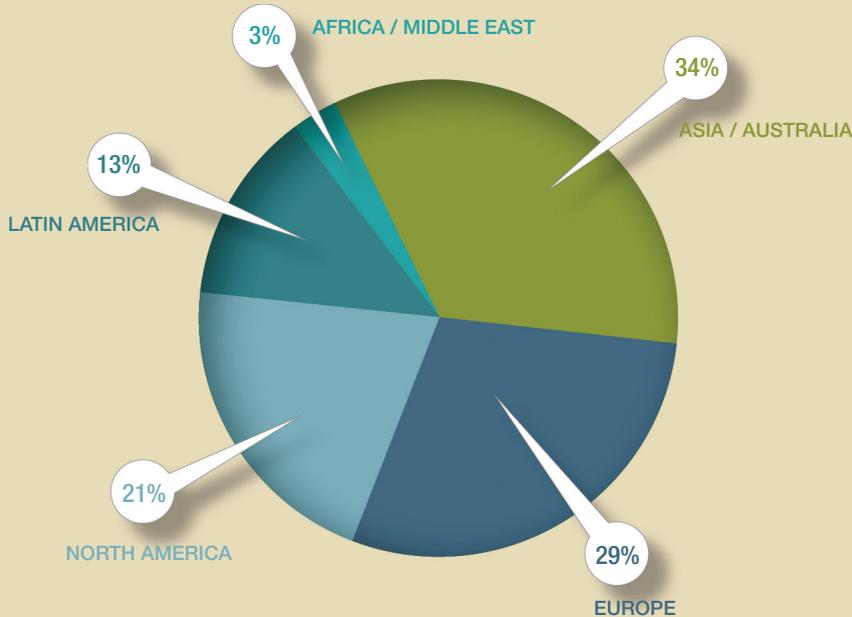
MARKETS, COMPANIES AND PRODUCTS



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 Brazil and China are the fastest growing natural personal care markets.

Sales of natural personal care products by region – 2013

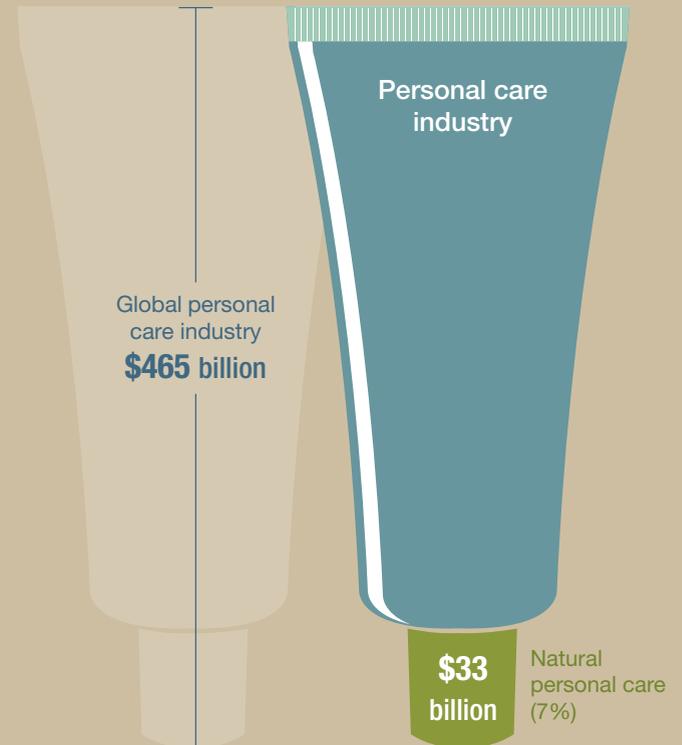


Predicted growth in the natural cosmetics industry (USD billion)



*CAGR (Compound Annual Growth Rate)

 Markets for cosmetic products using natural ingredients are growing but remain a small part of the overall cosmetics industry.





Revenues of the top ten cosmetic companies amounted to around \$121 billion in 2013.

Top ten cosmetic companies 2013

2013 sales (USD million)



In the natural personal care segment, ten companies represent nearly 50% of total market sales. In 2014 the top five claimed 29% of market share.

Top five natural cosmetics companies 2014

2014 sales (USD billion)



TRENDS IN RESEARCH AND DEVELOPMENT



Investments and approaches to R&D vary enormously.



Some companies use minimal technology to process raw materials to produce simple products for local sale. Research and innovation do not typically form part of the activities of such companies.



Some multi-national companies have very large R&D budgets, undertaking advanced research on new ingredients and delivery systems.



There is constant innovation to differentiate products, including use of well-known ingredients in new ways.



Natural brands are upgrading their portfolio with organic lines.



There is a greater focus on natural fragrances and make-up.



Consumers are demanding and companies increasingly supply proof of efficacy.



There is increased attention to delivery systems that stabilise, protect and enhance cosmetic activities on the skin.



Heightened cross-overs are evident between cosmetics, biotechnology, pharmaceuticals (cosmeceuticals) and food (nutricosmetics or 'beauty foods').

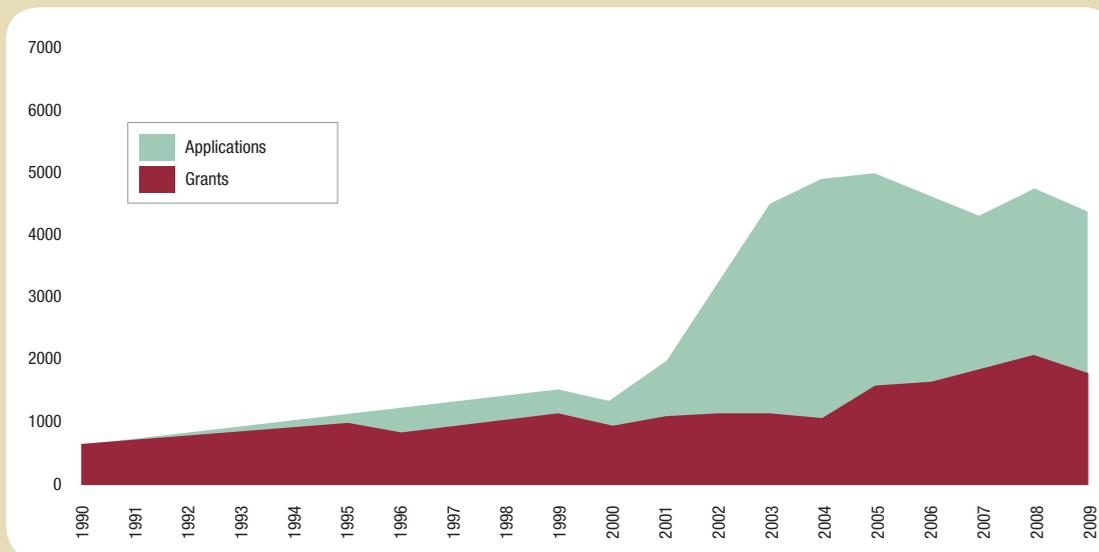


Probiotics and microorganisms are of increasing research interest.



Patents have become an increasingly important part of R&D strategies. Natural ingredients and extracts accounted for 49% of all patent activity in the personal care industry between 1990 and 2009, 34% attributed to plants.

Patent activity involving natural ingredients



Most species mentioned in patents are those long established in the trade, with *Aloe vera* by far the most ubiquitous.

Plants listed in patent applications for cosmetic use (1976 – 2010)

| SPECIES | PUBLICATIONS ¹ | CLAIMS ² | SPECIES | PUBLICATIONS ¹ | CLAIMS ² |
|---------------------------------|---------------------------|---------------------|---------------------------------|---------------------------|---------------------|
| 1 <i>Aloe vera</i> | 6730 | 12879 | 11 <i>Helianthus annuus</i> | 584 | 1732 |
| 2 <i>Glycine max</i> | 926 | 1249 | 12 <i>Mentha piperita</i> | 578 | 650 |
| 3 <i>Centella asiatica</i> | 915 | 3415 | 13 <i>Calendula officinalis</i> | 555 | 618 |
| 4 <i>Ginkgo biloba</i> | 913 | 2081 | 14 <i>Salvia officinalis</i> | 554 | 673 |
| 5 <i>Camellia sinensis</i> | 826 | 1382 | 15 <i>Olea europaea</i> | 548 | 1610 |
| 6 <i>Glycyrrhiza glabra</i> | 800 | 1463 | 16 <i>Matricaria chamomilla</i> | 505 | 466 |
| 7 <i>Vitis vinifera</i> | 797 | 1699 | 17 <i>Arnica montana</i> | 477 | 682 |
| 8 <i>Simmondsia chinensis</i> | 651 | 517 | 18 <i>Citrus unshiu</i> | 474 | 194 |
| 9 <i>Rosmarinus officinalis</i> | 647 | 1660 | 19 <i>Panax ginseng</i> | 464 | 909 |
| 10 <i>Vitellaria paradoxa</i> | 637 | 369 | 20 <i>Zea mays</i> | 461 | 995 |

¹ 'Publication' refers to publication of patent applications, not an issued patent;

² 'Claim' refers to the scope of the protection covered by a patent, or the protection sought in a patent application.



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ETHICAL AND SUSTAINABLE SOURCING



ABS requirements and ethical sourcing approaches are gradually being integrated into contracts between companies and suppliers.



Sustainability and ethical issues have become central to this industry and have considerable marketing value. The extent to which companies embrace these approaches differs depending on their size, markets, brands and philosophies.

Awareness of ethical sourcing of biodiversity in France, Germany, the UK and USA

2009

28%

2013

45%



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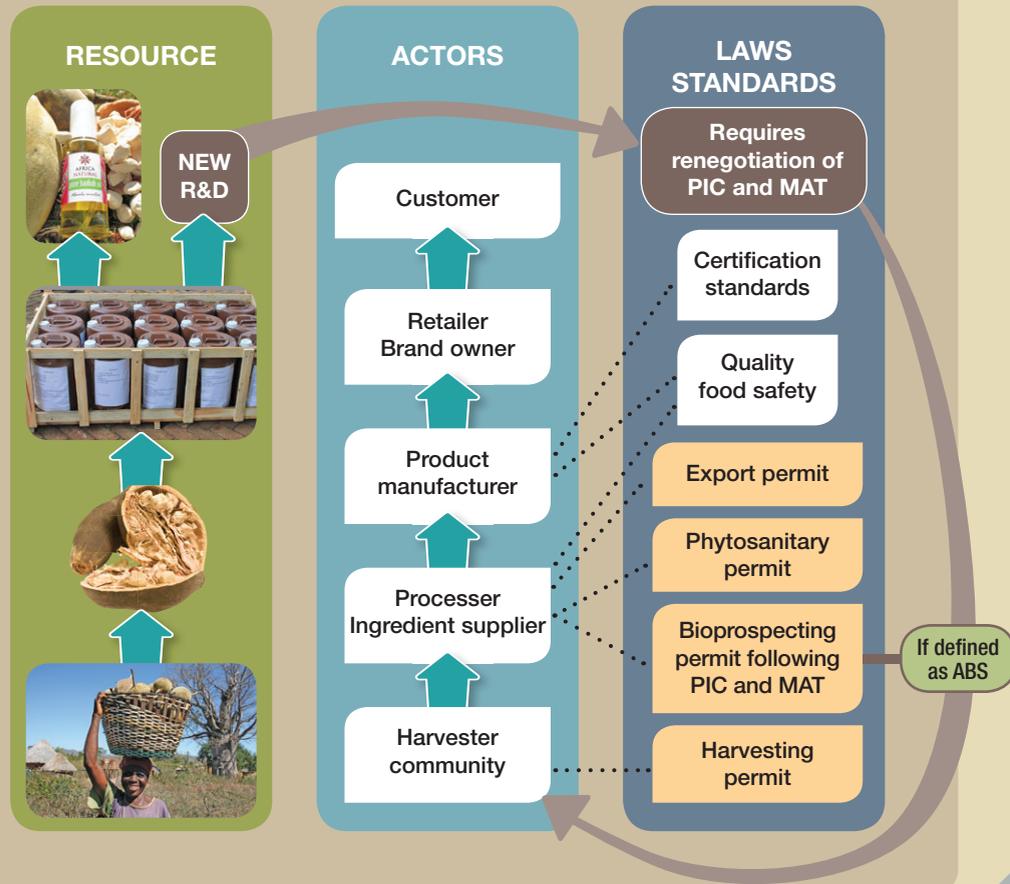


When we approach potential new supplier communities, we consider three questions: Is the ingredient of high quality? Does its collection and production empower the community? Do harvesting methods protect the environment?

– Estee Lauder Corporate Responsibility Report, 2012

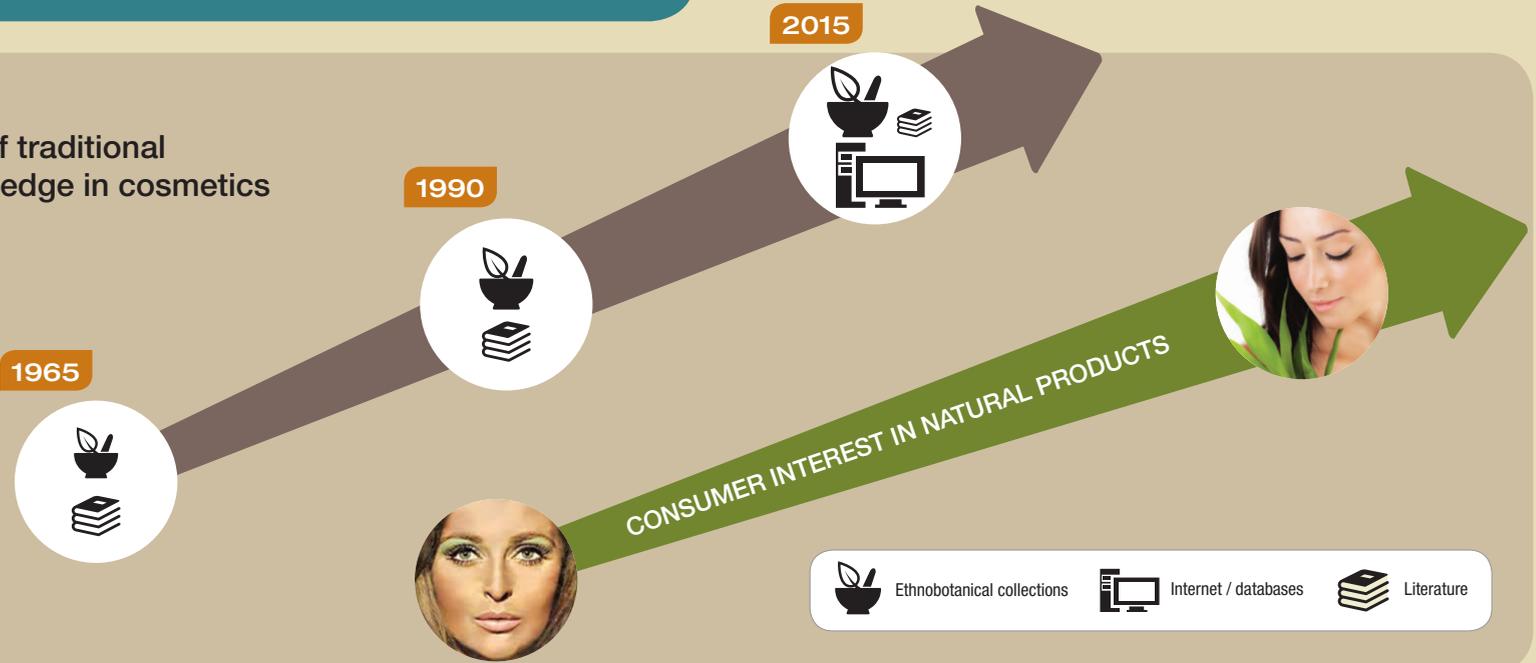
Developing a baobab oil

Developing a baobab oil product in South Africa requires not only a bioprospecting permit, which is issued upon proof of benefit sharing and PIC, but also a variety of other measures and standards. Any new R&D on the oil will require a renegotiation of ABS terms.



USE OF TRADITIONAL KNOWLEDGE

Use of traditional knowledge in cosmetics



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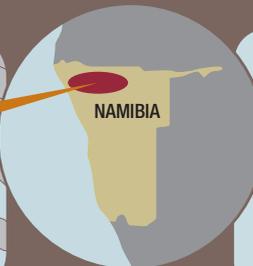


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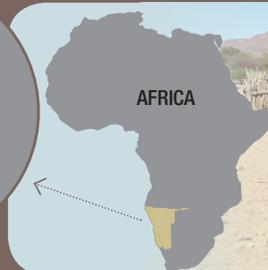
Traditional use of perfume plants by the Himba people of Namibia

Although the price and effectiveness of products remain central to consumer choice, the 'story' of products and ingredients is also paramount, especially for species and ingredients with an interesting background, origin or history of use.

Use of perfume plants of the *Commiphora* genus by the indigenous Himba in northwest Namibia, for example, paints an evocative picture of timelessness and tradition, and accompanies descriptions of the R&D undertaken on these plants by major cosmetics companies. PIC and benefit sharing have been central principles around which access has been negotiated between the Himba and these companies.



Area where *Commiphora* resin is sourced



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www.abs-initiative.info



www.bio-economy.org.za



www.peopleandplants.org

The **Access and Benefit-Sharing Key Points for Policy-Makers** series has been produced to provide governments, companies, researchers, communities and others with background information to assist with the development of access and benefit-sharing measures to implement the Nagoya Protocol. The briefs are organised around central, key points on trends and practices in markets, research and development, and ABS. More detailed information on these sectors can be found at: www.bio-economy.org.za; www.abs-initiative.info; www.peopleandplants.org; CBD Bioscience at a Crossroads policy briefs: <https://www.cbd.int/abs/policy-brief/default.shtml/>; and in the upcoming book: <http://www.routledge.com/books/details/9781138779099/>

Acknowledgements: Sincere thanks are due to the many individuals who contributed comments and insights to the development of this brief. In particular, we would like to thank Tobias Dierks, Maria Julia Oliva, Jaci van Niekerk and Paula Wood for their support and assistance with editing, review, research and design.

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