The Nagoya Protocol on ABS: Challenges & Opportunities to the Flavor & Fragrance Industry

UNDP-Webinar on Private Sector Experiences on ABS: Challenges and Recommendations

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Symrise: Company & Portfolio
Nagoya Protocol & ABS: Challenges to the Flavor & Fragrance Industry
Common industry activities in light of the Nagoya Protocol
Implementing ABS on the ground: Case studies
Conclusions
### Symrise AG

**At a glance**

<table>
<thead>
<tr>
<th>Category</th>
<th>Count</th>
</tr>
</thead>
<tbody>
<tr>
<td>Raw Materials</td>
<td>&gt;10,000 sourced from &gt;100 Countries</td>
</tr>
<tr>
<td>Employees</td>
<td>~10,000</td>
</tr>
<tr>
<td>Customers</td>
<td>~6,000</td>
</tr>
<tr>
<td>Operations</td>
<td>100 located in &gt;60 Countries</td>
</tr>
<tr>
<td>Products</td>
<td>~30,000</td>
</tr>
</tbody>
</table>
Symrise AG
A very diverse product portfolio

<table>
<thead>
<tr>
<th>Aroma Chemicals</th>
<th>Savory</th>
<th>Beverages</th>
<th>Sweet</th>
<th>Cosmetic Ingredients</th>
<th>Food</th>
</tr>
</thead>
<tbody>
<tr>
<td>UV Filters</td>
<td>Aroma Molecules</td>
<td>Menthols</td>
<td>Pet Food</td>
<td>Fragrance &amp; Flavor Ingredients</td>
<td>Performance Specialties</td>
</tr>
<tr>
<td>Personal Care</td>
<td>Cosmetic Ingredients</td>
<td>Oral Care</td>
<td>Home Care</td>
<td>Fine Fragrances</td>
<td>Proteins</td>
</tr>
</tbody>
</table>
“Utilization“ in the Flavor & Fragrance Industry

Commercial use of derivatives for fragrance creation

Two key „Nagoya questions“ we receive from our customers:
1. Are Symrise product solutions „Nagoya compliant“?
2. Do they transfer a „compliance issue“ into our final product?

ABS-Analysis and assessment of a fragrance

1. Which biological materials are included in Fragrance xyz?
2. From which biological species do they originate?
3. What is the country of cultivation (CoC)? What is the Provider Country (PC)?
4. Is there a national ABS law in CoC or PC place?
5. If so: Which biological materials and activities are in and out of scope?
6. Is a specific biological raw material or the whole fragrance in scope of national law?
7. What legal implications materialize at other value chain stages?

A typical fragrance can contain dozens of ingredients…
ABS, biotrade and commercial use of derivatives in F&F:
When a good & simple principle meets a complex value chain

Our value chain: From the source to the Flavor & Fragrance

…and because of high value chain complexity, one fragrance can be connected with multiple ABS laws.
Various national ABS laws in operation

_Potential implications to a hypothetical fragrance_

**Essential Oil 1 (India)**
- **Condition 1:** „Any biological resource from INDIA“ (not classified as „normally traded commodity“)
- **Condition 2:** Commercial use (e.g. as Fragrance or Flavor component)
- **Result:** Symrise to share 3-5% of benefits based on purchasing value

**Essential Oil 2 (South Africa)**
- **Condition 1:** Indigenous biological resource
- **Condition 2:** Commercial use
- **Result:** Symrise to share benefits on the basis of negotiations with local indigenous communities

**Essential Oil 3 (Brazil)**
- **Condition 1:** Native species from Brazil mentioned on „positive list“
- **Condition 2:** Commercial use as Fragrance ingredient
- **Condition 3:** Brazilian biological resource and Fragrance of same „olfactive family“
- **Result:** Customer to share 0,5-1 % of net revenue of final product
Utilization of GR/TK: Risk or opportunity?
*Common industry activities in light of ABS*

**HEADSPACE**
PIC/MAT required, if applicable law in place

**INSPIRATION**
At least ethical responsibility for ABS

Identification of biomolecular composition of "living scents" as template for fragrance creation

Olfactive inspiration for fragrance creation without any analytical insights into biochemical composition
Conclusions & Recommendations

1. Corporate ABS compliance management requires systemic „biodiversity mainstreaming“ across divisions, functions, regions as well as increased collaboration and communication between all value chain actors.

2. ABS is complex, but an important principle on the sustainable development agenda of Symrise.

3. Collaboration between regulators and business required to
   - Analyze & assess (and increase awareness for!) legal implications of diverse national ABS legislations to different types of business models, value chains, commercial activities, etc.
   - Support development and implementation of national legal frameworks that „work“ for both, the users and the providers.
Implementing ABS on the ground

Case studies

Vanilla planifolia (Vanilla)
Attalea speciosa (Babassu)
Agathosma betulina) (Buchu)

https://vanilla.symrise.com/
https://www.giz.de/en/worldwide/74622.html

„ABS friends“
THANK YOU
Symrise AG