1. **Agriculture: FOOD**

**Food sample**

|  |  |  |  |
| --- | --- | --- | --- |
| Field | Data type | Description | |
| Food Code | Text | Unique identifier of food | |
| Food Name | Text | Name of food | |
| Form of food |  | Grain, flour shelled, unshelled etc | |
| Food Category | Text | Cereals, Oilseeds, Spices, legumes etc | |
| **Names for Cereals**   1. Maize and maize products (grains, flour, cracked maize) 2. Sorghum and sorghum products (grains, flour), 3. Rice (brown/husked rice, polished rise) 4. Millet (grains, flour) | **Names for oilseeds**   1. Groundnut/peanuts and products (shelled groundnuts, in-shell groundnuts, peanut butter) 2. Cashew nuts 3. Pistachios 4. Brazil nuts 5. Hazel nuts |
| Month of harvest | Text | Month food was harvested | |
| Date of collection |  | Date of food sample collection | |
| Storage |  | Type of storage, open air, roofed | |
| Weight at collection | Text | N/A | |
| Unit of sample | Text | N/A | |
| Location | Text | Location(primary entity) | |

**Location**

|  |  |  |
| --- | --- | --- |
| Field | Data type | Description |
| Country | Text | Default field |
|  | Text |  |
| Ministry/ institution | Text | Ministry or authority in charge |
| Administrative Division | Text | Regional, provisional, county, township, village |
| Agro-ecological zone | Text |  |
| Name of location or village | Text |  |
| Point of collection | Text | Household, market, field, large scale stores |
| GPS coordinates | Text | GPS |

**Storage facility**

|  |  |  |
| --- | --- | --- |
| Field | Data type | Description |
| Store no | Text | Identifier of store |
| Food code | Text | Identifier of food sample |
| Store name | Text | Name of store |
| Type of storage | Text | Storae type, open air, roofed store, granary, - |
| Form of Storage |  | Packaging forms |
| ~~Duration~~ Date of storage |  | Date food was first stored o estimate period of storage |
| Location | Text | Location – refer to primary |

**Sample Analysis**

|  |  |  |
| --- | --- | --- |
| Field | Data type | Description |
| Sample code | Text | Predetermined PACA sample code to ease analysis |
| Food code | Text | Identifier of food |
| Date of collection | Text |  |
| Sample size | Text |  |
| Location | Text |  |
| Name of laboratory | Text |  |
| Analytical protocol/ method | Text |  |
| Aflatoxin type | Text | 1. Aflatoxin B1 (AFB1) 2. Aflatoxin-Albumin adducts 3. Aflatoxin M1 (AFM1 |
| Weight of sample at analysis |  |  |
| unit of concentration measurement |  |  |
| Value of concentration |  |  |

1. **Agriculture: FEEDS**

**Feed sample**

|  |  |  |
| --- | --- | --- |
| Field | Data type | Description |
| Feed Code | Text |  |
| Feed type | Text |  |
| Feed Category | Text |  |
| season | Text |  |
| Date of collection |  |  |
| Weight at collection | Text |  |
| Unit of sample | Text |  |
| Location | Text |  |

**Location**

|  |  |  |
| --- | --- | --- |
| Field | Data type | Description |
| Country | Text |  |
| Sector | Text |  |
| Ministry/ Research institution | Text |  |
| Administrative Division | Text |  |
| Agro-ecological zone | Text |  |
| Name of location or village | Text |  |
| Point of collection | Text |  |
| GPS coordinates | Text |  |

**Storage**

|  |  |  |
| --- | --- | --- |
| Field | Data type | Description |
| Store no |  |  |
| Feed code | Text |  |
| Store name | Text |  |
| Type of storage | Text |  |
| ~~Duration~~ Date of storage |  |  |
| Location | Text |  |

**Sample Analysis**

|  |  |  |
| --- | --- | --- |
| Field | Data type | Description |
| Sample code | Text |  |
| Feed code | Text |  |
| Date of collection | Text |  |
| Sample size | Text |  |
| Location | Text |  |
| Name of laboratory | Text |  |
| Analytical platform | Text |  |
| Aflatoxin type | Text |  |
| Weight of sample at analysis |  |  |
| Concentration unit |  |  |
| Value of concentration |  |  |

1. **Health**
2. **Bio maker Data**

|  |  |  |
| --- | --- | --- |
| Field | Data type | Description |
| Subject Code | Text |  |
| Gender | Text |  |
| Date of birth | Text |  |
| Date of collection | Text |  |
| Sample size |  |  |
| Biomarkeroptions/Base | Text | 1. Biomarker base:    1. Urine    2. Blood    3. Milk    4. Feces    5. Hair |
| Location | Text |  |

1. **Location**

|  |  |  |
| --- | --- | --- |
| Field | Data type | Description |
| Country Code | Text |  |
| Country Name (Parent) |  |  |
|  | Text |  |
| Ministry/ Research institution | Text |  |
| Administrative Division | Text |  |
| Agro-ecological zone | Text |  |
| Name of location or village | Text |  |
| Point of collection | Text |  |
| GPS coordinates | Text |  |

1. **Sample analysis**

|  |  |  |
| --- | --- | --- |
| Field | Data type | Description |
| Subject code |  |  |
| Aflatoxin Biomarker type | Text | 1. Aflatoxin biomarker types:    1. Aflatoxin B1 (AFB1)    2. Aflatoxin-Albumin adducts    3. Aflatoxin M1 (AFM1) |
| Biomarker Base | Text | 1. Biomarker base:    1. Urine    2. Blood    3. Milk    4. Feces    5. Hair |
| Date of analysis | Text |  |
| Testing protocol/method | Text |  |
| Aflatoxins Biomarker levels | Text |  |
| Unit of concentration measure | Text |  |
| Location |  |  |

1. **Diseases/Condition (**Cancer, HIV-AIDs, Hepatitis B-status….etc.)

|  |  |  |
| --- | --- | --- |
| Field | Data type | Description |
| \*Subject code | Text |  |
| Diagnosis date | Text |  |
| Results/Disease type /condition type | Text | 1. Aflatoxin related disease/condition type    1. Liver cancer    2. HIV    3. Liver cirrhosis    4. Growth indicators (weight, height/length , age)    5. Kwashiorkor |
| Gender | Text |  |
| Date of Birth | Text |  |
| Symptoms or signs | Text |  |
| Body weight | Text |  |
| Body height |  |  |
| Health center name |  |  |
| Location | Text |  |

**Consumption pattern - Food Staple (**Extent of consumption of aflatoxin prone crops)

|  |  |  |
| --- | --- | --- |
| Field | Data type | Description |
| \*Subject code | Text | Relates to same subject under review |
| Consumed Food type | Text | Provide a questionare with list of food types related t Aflatoxin contamination (Closed ended) |
| Crop base??/ Treatment?? | Text | 1. **Treatment**    1. Dehulled    2. Wet milled    3. Dry milled    4. Mixture/composite    5. Ground    6. Extruded    7. Boiled    8. Fried    9. Roasted    10. Baked |
| Frequency of consumption | Text |  |
| Quantity of consumption | Text | Number of days consumed per week – habitual consumption |
| Food processing method | Text | Quatity of diay consumption per gram |
| Food storage | Text |  |
| Location | Text |  |

**Rate of Childhood Stunting**

|  |  |  |
| --- | --- | --- |
| Field | Data type | Description |
| \*Child code | Text |  |
| Date of Birth |  |  |
| Total population ?? | Text |  |
| Percentage of stunted children?? | Text |  |
| Method of consumption | Text |  |
| Food storage | Text |  |
| Location | Text |  |

1. **Trade**

**Aflatoxin standards used**

|  |  |  |
| --- | --- | --- |
| Field | Data type | Description |
| \*Standard code | Text |  |
| Name of standard |  |  |
| Date of verification |  |  |
| Food type | Text |  |
| Aflatoxin type tested | Text |  |
| Aflatoxin limit acceptable | Text |  |
| Unit of concentration measurement | Text |  |
| Location | Text |  |

**Exports Rejections**

|  |  |  |
| --- | --- | --- |
| Field | Data type | Description |
| \*Food code | Text |  |
| Food type |  |  |
| Date of export |  |  |
| Date of rejection | Text |  |
| Quantity of Exports in (KGs/tonns) | Text |  |
| Border control post | Text |  |
| Name of Authority | Text |  |
| Origin of export |  |  |
| Destination country |  |  |
| Owner of Consignment |  |  |
| Location | Text |  |

**Imports**

|  |  |  |
| --- | --- | --- |
| Field | Data type | Description |
| \*Food code | Text |  |
| Food type |  |  |
| Date of imports |  |  |
| Date of rejection |  |  |
| Origin or Import country |  |  |
|  | Text |  |
| Quantity of imports (tonnes/Kgs) | Text |  |
| Border control post | Text |  |
| Name of Authority | Text |  |
| Owner of consignment |  |  |
| Location | Text |  |

Export Rejections

|  |  |  |
| --- | --- | --- |
| Field | Data type | Description |
| \*Food code | Text |  |
| Date of exports |  |  |
| Export country |  |  |
| Trading activity????? | Text |  |
| Volume of imports (tonnes) | Text |  |
| Border control | Text |  |
| Name of Authority | Text |  |
| Estimated revenue |  |  |
| Exporter (private or Govt) |  |  |
| Aflatoxin level |  |  |
| Rejected consignment |  |  |
| Location | Text |  |

* Need to discuss on the year when data should be submitted from
* We may create a simple tool to collect some data for example in doctors
* Socio-economic factors to be considered?? Consider in the annual reports??