



# FINAL REPORT

*Inventoring  
of Egyptian Typical/Terroir  
Food Products*



**ENROOT**



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**PAMPAT**  
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Projet d'Accès aux Marchés  
des Produits Agroalimentaire  
et de de Terroir





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## INTRODUCTION

Egypt's culinary heritage is grounded in the historical and ecological contexts of the Nile and the surrounding deserts and other unique ecological niches. It encompasses a wide range of foods, recipes, and production methods. Over the millennia, trade, migration and occupation have brought many waves of foods, technologies and dishes that were adopted locally and have since adapted to and been adapted by the socio-ecological and cultural context. While there are many aspects of the cuisine that are common to most of Egypt environmental, cultural and genetic differences mean that not only is there a cascade of diverse foods running across the country, but that even similar products produced in different regions have distinct nutritive and organoleptic characteristics related to both production techniques and terroir. In addition, there are a number of culturally and ecologically distinct groups and regions with their own local plants, animals, food processing approaches, and cuisines.

Over the course of the last several decades, rapid urbanization and modernization of Egypt's economy, coupled with low socio-economic mobility and policies that prioritize large-scale industrial food production, have threatened many of these culinary traditions. However, recent years have seen a growing interest in identifying, preserving and developing Egypt's food heritage. Initiatives have included various approaches to investigate the potential for origin-linked collective labeling, cluster-based development of specific products or sectors, to expanding urban interest in local products evident in the emergence of initiatives such as Slow Food, all paralleling the global rise in foodie culture.

Recent donor projects, government policies and strategies and community-based initiatives demonstrate an interest in not only documenting and preserving culinary heritage and traditional products, but also leveraging them to promote socio-economic development through the agricultural, industrial and tourism sectors. International experiences provide widespread evidence that **origin-linked food products**, commonly referred to as **Terroir**, represents a fine entry points for socio-economic development, as well as female empowerment, environmental sustainability and cultural preservation and rejuvenation. However, such evidence also ties origin-linked products effectiveness to pursuing it with strategies that consider local community development including the interests of marginalized groups, ecological factors, and integrated cluster, regional- and national-level policies.

Given the global growing interest of consumers for traditional products that are directly related to the origin/ territory, hence the term "terroir", there is an unutilized potential for Egyptian traditional food producers to differentiate their products in the market from generic and standardized ones. This would provide access to better markets for them, an incentive for producers to follow sanitary norms and measures as well as put down product specifications, which constitute tools for value chain development. Moreover, this would raise the intangible assets compensation for the local communities. Based on the above, there is a growing interest in promoting and encouraging the traditional food products in Egypt as a tool for sustainable rural development.



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In this context, UNIDO Egypt in coordination with Egyptian Chamber of Food industries calls for the organization of a national competition as a promotional tool for traditional food products to be organized in partnership with public and private sector institutions.

The promotion of typical products has many advantages: collective brand image, improving income for the population, preserving or creating jobs in the regions, enhance products' quality, maintaining an authentic culture alive, etc. The contest and the Market associated to it, are also an opportunity to gather all the local products of a country in one place.

Moreover, it allows to establish a positive competition between different products of the same country by triggering the participation of all the regions and territories concerned.

A prerequisite step for the organization of this competition is

1. Putting a clear and shared definition of terroir products to be integrated into the national contest
2. Preparing an inventory of Egypt traditional food products to be a reference for the competition preparation.

### Project objective

Conduct a mapping study on Egyptian terroir food products, linking it with the local knowledge, in addition to defining the categories to be integrated into a national contest in a clear and shared definition of terroir product

### Expected Beneficiaries

- ° Rural farmers of Egyptian traditional food
- ° Local and rural producers of the Egyptian traditional food
- ° Members of Egyptian Food Chamber

### Mapping Scope

Considering the richness of the Egyptian food cuisine, the mapping exercise focuses only on raw and processed food products. This implies that cooked dishes and recipes are excluded. The rationale for this was to serve both the inventorying purpose and the scope of the national contest that is focused on processed products. Moreover, the mapping limits traditional food products from which terroir/origin linked products will be identified, based on an evaluation grid to be elaborated in the methodology section. A distinction between traditional and terroir food products **within the context of this mapping** is provided below. In addition, the mapping spans the 27 governorates and different oases in the Egyptian territory.



Traditional Food Product	Terroir / Origin-Linked Food Products
Food products that locals identify as an integral part of their regular cuisine and diet, and they affiliate it with their history, heritage, culture and identity.	The word terroir is derived from the word Territory, meaning the land, Hence terroir products are the ones whose quality and specifications could be traced to a certain land/area/region/territory owing to both natural and human factors.

Figure 1 Traditional Vs. Terroir Food Products<sup>1</sup>

The Natural factors include different plant varieties or animal species, climate and soil. Human factors include local knowledge passed down from one generation to another generation.

### Purpose of the final report

The final report aims at presenting the current legal framework of terroir products in Egypt, the methodology employed to construct the database of traditional food in Egypt, the evaluation grid applied to identify terroir products and a brief description on the identified product list. In addition, this report sheds light on the policy and legal framework surrounding terroir products.

### Report Outline

The report is divided into 1) Introduction, 2) Terroir legal framework in Egypt, 3) Methodology, 4) Findings and 5) supplementary annexes.

<sup>1</sup> According to FAO organization's identification methodology of Terroir products, Terroir is "a delimited geographical area in which a human community has built up a collective intellectual or tacit production know-how in the course of history, based on a system of interactions between a physical and biological environment and a set of human factors, in which the sociotechnical trajectories brought into play reveal an originality, confer typicity and engender a reputation for a product that originates in that terroir"



## TERROIR LEGAL FRAMEWORK IN EGYPT

Since the submission of the UNIDO Egypt Terroir pre-assessment report, the legal frameworks for food safety and labelling have undergone positive advancements. Since 2017, on-going efforts to institutionalize procedures for Geographical Indication are motivating market forces for smallholders to organize in the preservation of Egyptian products with origins to the territory. Improving capacities of smallholders, but also the involvement of public authorities, promotes trade rewards and incentives to sustain local and unique food systems.

Moreover, a national authoritative body for setting safety standards and licensing of safe processed foods was established, namely the National Food Safety Authority (NAFSA), which can also improve the export potential of terroir food enterprises.

### Committee for Geographical Indication

An Inter-ministerial committee with members from the Ministry of Agriculture and the Ministry of Internal Trade was established as a result of the activities of the EU-JRDP Gi Matrouh project, led by CEDARE. An international expert of GI, Monique Bagal, ran a series of workshops, trainings, and exchanges with Morocco with multiple stakeholders and supported them in designing options for legal frameworks and structures to test the registration of the project 3 key project of Barshoumi figs, Barani grapes and Argan oil

At the governorate level, a permanent committee, acting as a quality control body, is housed under a local NGO called Matrouh Association for Desert Agriculture Development (MADAD). The GI Matrouh Committee (“GIMC” which reads as “GEEMS”) includes members of the agricultural directorate, researchers from the Ministry of Agriculture, and staff of the Ministry of Internal Trade. The purpose was to establish a neutral body to assess the products and the standards agreed upon for the GI label. The products are nominated by groups of producers under a not-for profit legal registration such as NGO, association, cooperative, Water User Association.

On December 12th, 2019; a Ministerial Decree will formalize the GI registration mechanism and newly established committee. The expectation is that the Desert Research center will replicate the process successfully with new value chains such as Barki Sheep. It is worth noting that the GI label in Egypt, can be nationwide, as was previously registered the Egyptian Cotton. The committee therefore will work with local governorates, but it is also possible through this process to register Terroir products that are Egyptian, and not necessarily specific to a particular place (such as some types of dates, breads and cheeses). The registration process applies to raw products, but also processed foods and based on the technicalities other Ministries are invited to assess and approve the products e.g. Ministry of Trade and Industry amongst others.

On March 9th, 2020; the Ministry of Supply and Internal Trade of Egypt announced that it has started the registration of geographical indications for the first time in the country.



This decision comes to maximize the value of Egyptian products, whether agricultural or handicraft, and increase opportunities for exporting them abroad while ensuring the protection of their geographical origin. The Ministry affirmed that this is the first time that Egyptian products will have specific geographical origin and possess qualities or a reputation that are due to that origin. As a first stage, the Ministry began registering the geographical indications for some commodities; and the registration will cover a wide range of Egyptian products afterwards.

### National Authority for Food Safety (NFSA)

The National Authority for Food Safety (NFSA) is an independent body, reporting directly to the Prime Minister and mandated to guarantee high food safety standards across the entire value chain and to protect consumer health. Since 2007, the establishment of a unified body has been the mutual interests of Ministries of Trade and Industry, Health, Agriculture, Tourism, and the Environment, along with key stakeholders of the private and public sectors. The previous reality of food safety certification is dispersed across over 15 agencies creating a maze and a challenge to monitor safety and quality to consumers let alone invest in their export potential. The creation of NAFSA is a great indicator on the intention for Egypt to improve food safety and international trade .

In February 2019, the Ministerial Decree No. 412/2019 promulgates the Executive Regulation of Law 1/2017 outlining the NFSA authorities as well as the licensing and compliance requirements that should be observed and followed by food producers. As per Article 2 the mandate is “achieving the requirements of food safety in a way as to preserve human health and safety”. This law applied to all foods for human consumption whether primary, raw, uncooked, whole, semi-processed or processed, including beverages. Under the NFSA umbrella all operations are monitored from food handling, storing, transporting, preserving, processing, exporting and importing. The Law applies to all actors in the food chain starting at the farm gate - whether private or public but also includes the monitoring of safety and hygiene at slaughterhouses .

Food facilities submit request for their food registration and licensing in order to enter national and international markets. The food procedures are inspected and monitored by NFSA at a fee. It usually takes from 6 to 8 months for the Executive Regulations to become actionable, therefore it is yet to be seen how it will support smallholder producers, especially requiring certification of licensing of processing units in rural zones .

NFSA thus far has signed 5 cooperation protocols with 5 different organization cooperation to promote and facilitate the food safety process. The protocols elaborate on the means of cooperation and mechanisms that shall allow each of these organizations to implement its mandates regarding food safety. They also specify the means for licensing and issuing certificates according to the organization’s mandate. These 5 organizations are :

> **Egyptian Organization for Standardization and Quality (EOS)** : is the national entity in Egypt mandated to assume all the relevant activities of 1) preparing and issuing Egyptian



standards, 2) quality assurance and conformity assessment for the relevant products, 3) testing & industrial measurements. EOS mission is to increase the quality of the Egyptian products to be competitive in the international and local markets along with consumer's protection and environment.

In collaboration with FAO, NFSA and EOS agreed on a project in Dec 2019 to strengthen the food control system in Egypt as well as food system

- > **Central Administration of Plant Quarantine (CAPQ)** : a governmental body affiliated to the Ministry of Agriculture and Land Reclamation (MALR) that is mandated with preserving Egyptian plants health.
- > **Horticultural Export Improvement Association (HEIA)** : an industry-driven association supporting the Egyptian horticultural community (producers, exporters and suppliers) aiming to increase exports of fresh produce through continuous improvement of quality production, marketing, policy advocacy, training and management assistance
- > **General Organization for Export and Import Control (GOEIC)** : service authority that protects consumers, preserves Egypt's reputation by inspecting commodity exports and imports through latest techniques and scientific equipment and preparing statistics of exports and imports.
- > **Port Said Chamber of Trade** : a businessmen association where all Traders in Port said governorate are enlisted in it.

NAFSA will also be cooperating and receiving support from external bodies such as UNIDO (e.g. SAFE project), WFP and the LandOLakes in the development of their capacities, improving their technical and managerial skills, as well as focusing on consumer awareness for food safety.



## METHODOLOGY

The mapping study is conducted over 4 stages: 1) preparation; 2) data collection; 3) evaluation and 4) Validation.

### Preparation Stage

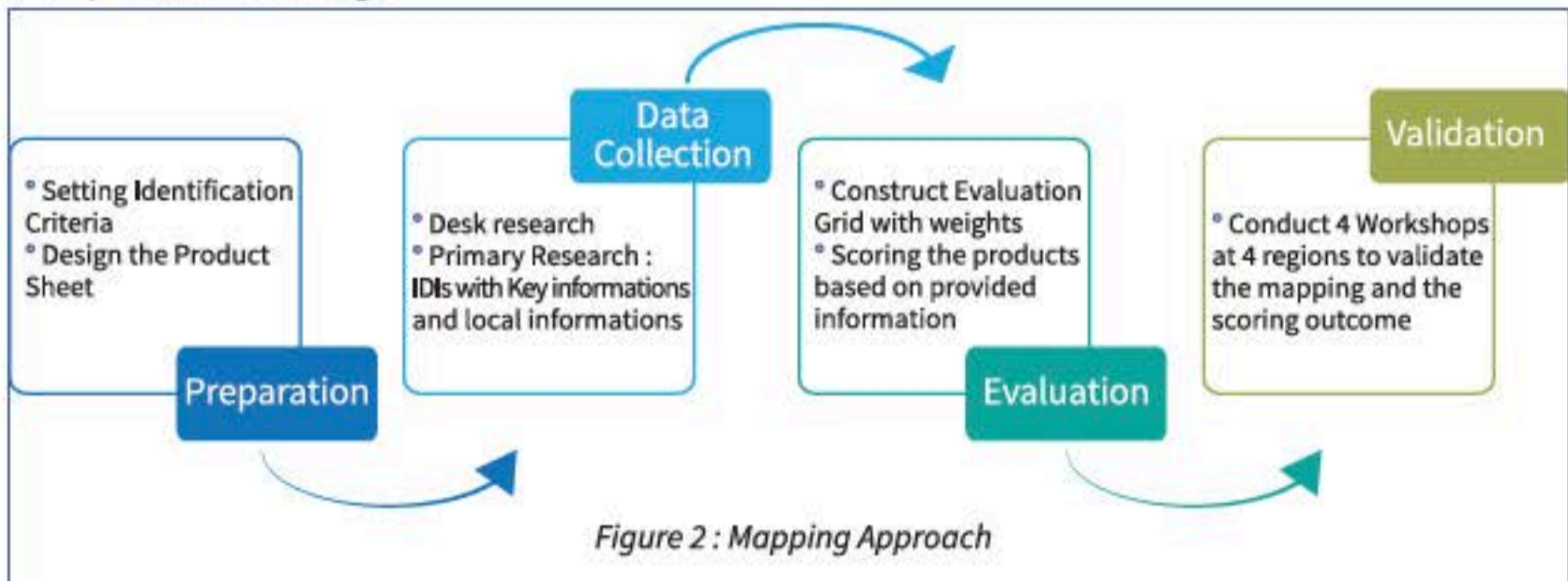


Figure 2 : Mapping Approach

This stage aimed at preparing for the data collection stage through two main activities:

1. Identifying the criteria that constitute Egyptian Traditional Food
2. Design the product sheet to be used during data collection to gather product specific information that shall be used later to aid in the evaluation process

### Identification Criteria of Egyptian Traditional Food

Based on desk review of the reports of PAMPAT project in Tunisia, Morocco and Georgia in addition to FAO origin-linked identification methodology, four criteria were selected as a

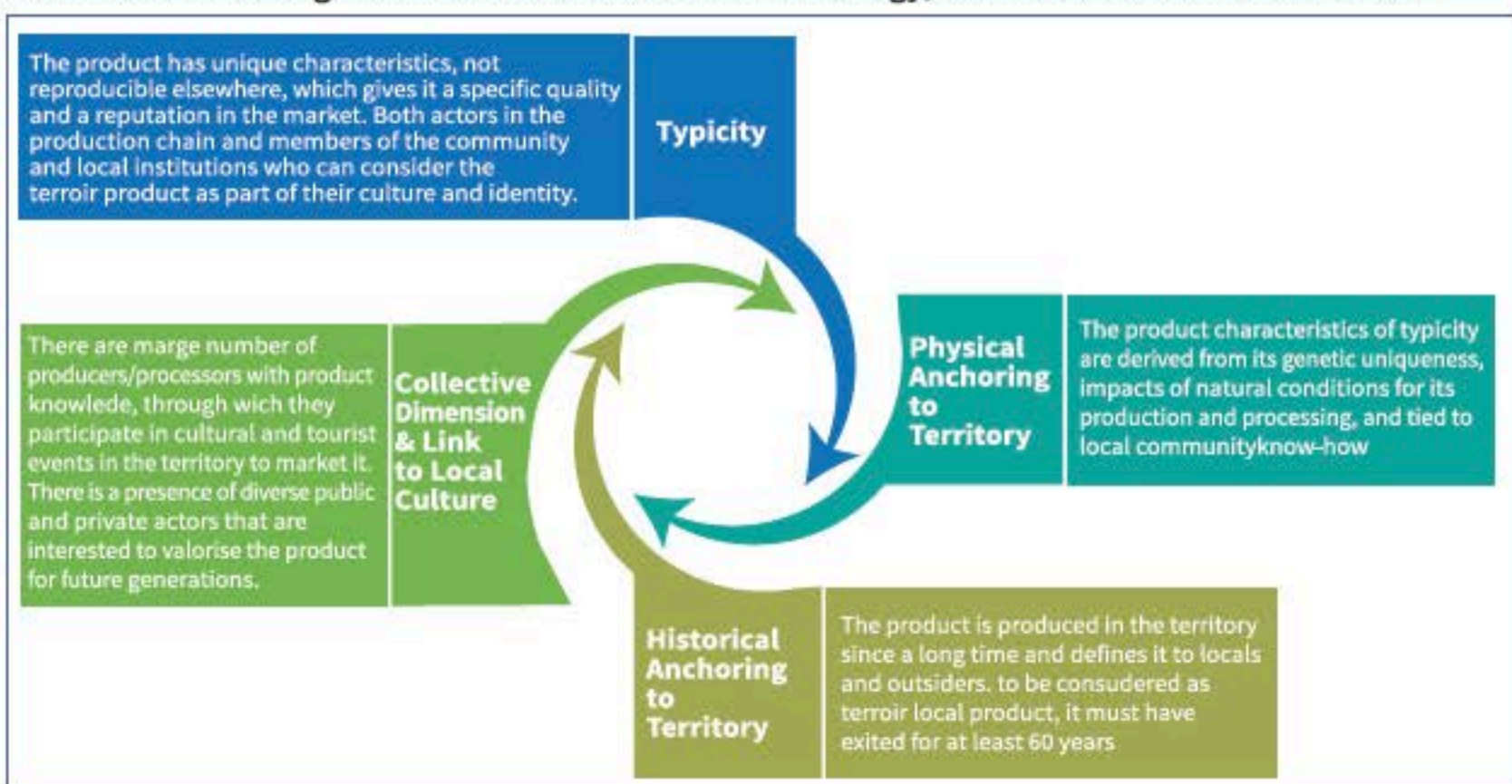


Figure 3 : Terroir products identification criteria



frame to what constitute terroir food products. These criteria are : Typicity<sup>2</sup>, Physical anchoring to territory, historical anchoring to territory and collective dimension and link to local culture. The below figure provides an illustration for these dimensions.

### Product sheet design

The product sheet is a data collection tools that include questions/information areas that address the above four dimensions. Each dimension is represented by multiple questions. The product sheet template is provided in Annex 1

The product sheet includes questions on 1) the different names of the product including both Arabic, English and any other common names whether scientific, market or local names, regions of the product, type of product, physical characteristics, reasons of products uniqueness, variants of the products, historical reference of its existence, links to culture and heritage, how is the product made, how that knowledge is transferred, product marketability scale, in addition to the category of the product. The category set preidentified for the mapping include 8 categories as illustrated in the below figure.

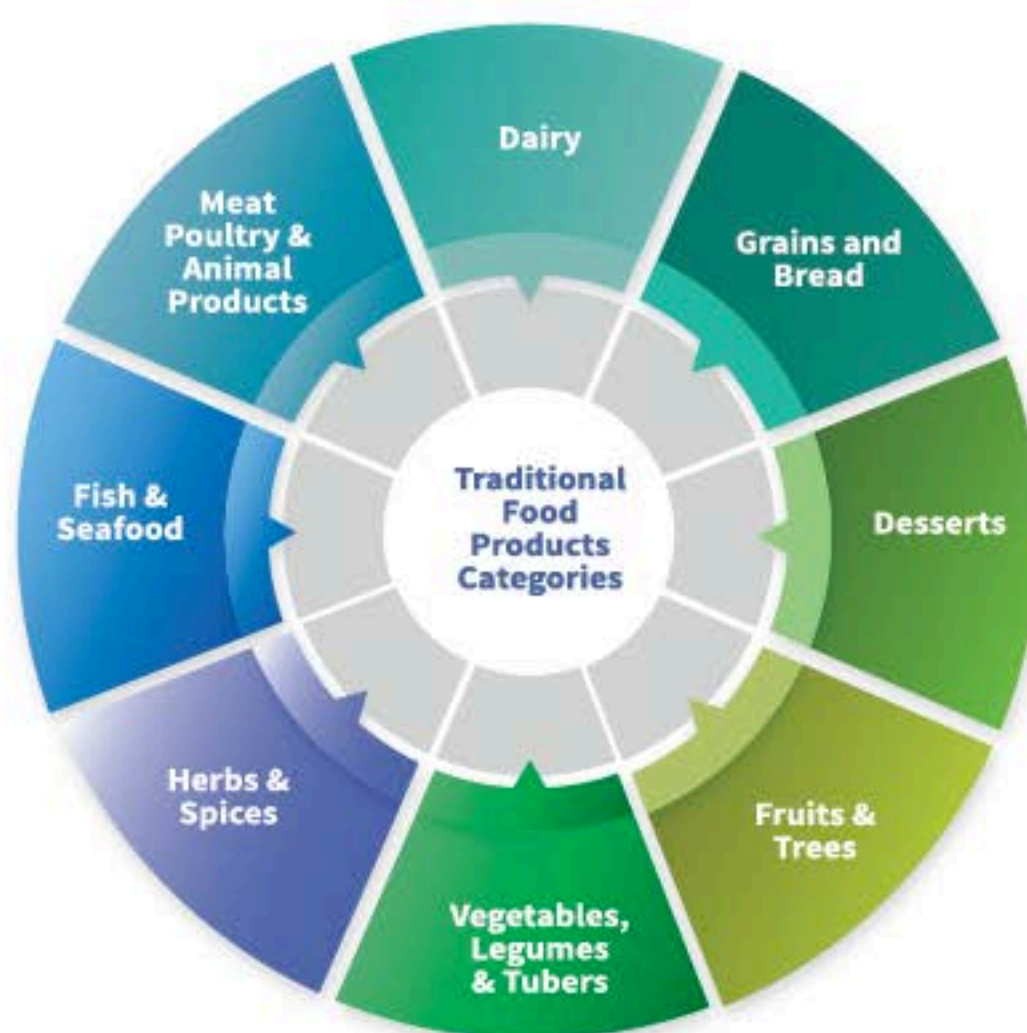


Figure 4 : Traditional Food Products categories

<sup>2</sup> FAO methodology identifies typicity as "the typicity of an agricultural or food product is a characteristic belonging to a category of products that can be recognized by experts or connoisseurs on the basis of the specific attributes common to such products. Typicity expresses the possibility of distinguishing an origin-linked product from other similar or comparable products, and thus underlies the identity of the product. It may include a degree of variability within the category, but such variations do not compromise its identity. These properties of the category are described by a set of characteristics (technical, social, cultural) identified and defined by a human reference group, based on know-how distributed among the various stakeholders in the value chain: producers of raw materials, processors, regulators and consumers".



## Data Collection Stage

The data collection stage objective is to map traditional food products, that represent a potential for terroir product list. A comprehensive approach was taken combining both desk review of secondary resources and gathering primary data using qualitative data collection tools.

### Desk Review

Several secondary resources were identified and analyzed to identify potential Egyptian traditional food products. These resources are cited in the References chapter, below. In addition, several reports and draft strategies have been reviewed :

- > Identification of origin-linked products and their potential for development
- > Publications by the Egyptian food council and the Food export council
- > Egyptian food Composition analysis studies by the National Nutrition Institute
- > UNIDO Preliminary assessment of Terroir Products in Egypt
- > Our food book by Dr. Mohammad Zaki Shafy
- > Kanz ElFawa'ed Fe tanwee3 Elmawa2ed / كنز الفوائد في تنويع الموائد
- > Egypt Palm Dates Atlas
- > Draft National Strategy to Improve the Date Sector in Egypt study
- > UNDP report on horticulture value chains in Egypt
- > Salasel project report on palm dates in Egypt
- > Egypt's culinary history by ElRawi Heritage Review Journal, 2019, 10<sup>th</sup> Edition

### Primary Research

Semi-structured interviews were selected as a data collection tools to reflect the participatory approach employed to conduct the mapping and to give room to both the participants to add insights beyond the guiding questions and the interviewee to guide the discussions and raise a probing questions based on these insights. Two data collection tools were employed during the interviews

**1. Discussion Guideline:** it is designed mainly as an aiding tool to start the interview and for key informants to a) list traditional food products that they are aware of; b) suggest secondary sources that can be reviewed due to the limitation of comprehensive and concise secondary resources on terroir products; and c) recommend other informants and their contacts who can provide more details on the food products they identified. The discussion guideline is provided in Annex 2.

**2. Product Sheet:** It is used in the interviews after the discussion guideline if the interviewee demonstrated detailed awareness of some products characteristics and specification, where the interviewers use it to complete the product information.



A total of 42 In-depth interviews (IDIs) including both face to face and phone interviews were conducted with both key and local informants. Interviews took on average between 2 and 3 hours, they were also conducted on multiple sessions. In order to ensure the interviewees' understanding of the mapping scope and objective, an extensive introduction was given prior the beginning of the interview, in addition to posing probe questions on their answers about the products details to ensure they meet scoping criteria of the study : 1) raw or processed; and 2) traditional not modern or recently introduced<sup>3</sup>.

Moreover, in some cases the study team complemented the primary data with desk review of online resources such as newspaper articles and YouTube food bloggers videos to ensure the compatibility of identified traditional products with the mapping scope. Such steps are considered for the purpose of quality assurance.

On one hand, key informants involved sector experts, agriculture experts, GI experts and Academics; on the other hand, local informants where the ones who obtained data from local inhabitants to ensure local community involvement. These local informants were oriented with the product sheet attached in the annex to understand the objective of the mapping and what level of information we are looking for. The list of interviewees name and their roles/expertise is provided in Annex 3.

## Evaluation Stage

### Evaluation Grid Design

The design of the evaluation grid involved 1) identifying assessment criteria elements per the 4 identification criteria of terroir products; 2) Assigning weights for each identification criteria and distribute these weights over the assessment criteria; 3) putting down the grading scale.

#### *1) Identifying assessment criteria elements*

The assessment criteria were selected after the review of the Tunisian and Georgian evaluation grid in addition to FAO identification methodology of Terroir. It was chosen based on which combination would represent the Egyptian Context.

**1. Production/Processing uniqueness to area/region** to reflect whether the product production is 1) limited to one area, or 2) spans multiple areas but with different characteristics, or 3) spans multiple areas in Egypt but with same characteristics, or 4) whether it can be considered a standardized product that exists everywhere, not just in Egypt with the same characteristics.

<sup>3</sup>For example, the interviewee in Luxor listed a product called "Sekhena"; upon asking probing questions and looking the product up; the study team realized that this product is a cooked recipe which did not meet the criteria. Another example, the Delta key informant listed a dessert named "Medala", which is famous and limited to Tanta, Gharbiya and they consider it traditional during the month of Ramdan. Upon looking the product up using different online sources, it turned out that these product is an innovation that was introduced less than 10 years ago in the dessert shops in Tanta; therefore it was not added to the traditional food product database.



**2- Characteristics of the product:** this criterion reflects the quality of the product and whether 1) it is easily distinguishable by regular consumer or 2) it requires experts' opinion or scientific examination. For some products, 3) there had been quality characteristics in the past that do no longer exist and 4) for others there is no distinct quality per se.

**3- Relation of the product to local identity/culture:** To what extent locals perceive this product as part of their culture, heritage and identity. For some products, 1) there are clear evidence of the strong link between both; for other products, 2) it is an element of their culture. 3) Some products while their physical existence is rooted in the area, are only identified by limited number of the local; in that case it is assumed that the role of passing on from one generation to another that varies from one family to another represent the significance of variation in cultural affiliation perception. 4) Other products, while being produced in a specific territory, are not culturally affiliated to the locals in territory.

As for the physical anchoring criteria, there should be a distinction between sub-criteria applied to each product category and the fish and seafood category. The seafood category physical dimension is assessed by :

**1- Link of the product to territory:** This shows how the territory determines the nature of the product. For instance, if the product comes from a certain lake in the territory.

While the remaining categories' physical dimension is assessed by:

**1- Reputation of the product to area/region/country :** It indicates two aspects 1) how the product shapes the reputation of the territory and 2) how the territory landscape is shaped by the product.

**2- Raw material genetics originate from the area/region:** This is a criterion that shows the extent to which the genetics of either the product itself or the raw materials used in processing are endemic to the territory. Some products are endemic, while others are exotic, however landraces developed over the years. In some cases, the product could be partially endemic but has been fused with exotic materials. Other products while are famous in a certain territory, all their raw materials are imported from outside the territory; for instance, in agriculture products, it is the case when the seedlings or the seeds are imported from a different country.

**3- Natural conditions determine product uniqueness:** This is to indicate the extent to which the product uniqueness is affected by the pedoclimatic conditions. Some product uniqueness is solely determined by the pedoclimatic conditions, while for other products, it only represents a factor in what construct the uniqueness.

**4- Links between know-how and the territory:** This criteria assess if the know-how effectiveness is limited to the territory, meaning that if the local individual who possess the know how cannot produce the exact same quality of the product if he is taken out of his/her place. In other words, it reflects the relation of know-how to pedoclimatic conditions of the territory



The 3<sup>rd</sup> dimension of Terroir product identification, Historical anchoring is assessed by **how long the product has existed in the region or territory**. Within the Egyptian context and history, the products existence was identified according to 4 historical periods: Less than 60 years; Between 60-200 year; Between 200- 500 years; More than 500 years.

The overall rationale for these periods selection is that Egypt has a very deep history and while it is tempting to search for the origins of our cuisine in pharaonic times, its utility is limited because of all the ecological and political economic changes that have accrued over the millennia. We can see that many other places in the world have strong deeply embedded food cultures that are much more recently emerged. Our rubric for this score seeks to balance these two motivations: deep authenticity while not romanticizing the past and the expense of modern cultural heritage. We use 60 years to represent the fundamental changes to the agricultural ecology created by damming the Nile. Prior to that, in the 19th C, Mohamed Ali and his successors changed the political economy of Egyptian agriculture, introducing new land ownership arrangements and entire new industries. We use 500 years as a line to roughly represent two major processes: the absorption of Egypt by the Ottoman Empire and the effects of the Colombian exchange and the numerous new plants that came from the New World (including such intrinsically Egyptian ingredients like tomatoes, chili peppers, maize, and common beans).

The Collective Dimension and Link to Local Culture, the 4<sup>th</sup> dimension, is assessed by two aspects:

**1- The know-how has a collective dimension and transferred from generation to generation:** The existence of know-how and how different techniques have been transferred between generations and whether the expertise and the skills are preserved in a collective effort or it is becoming limited to specific groups and becoming rare.

**2- Cultural and touristic events related to product consumption or production:** while in Georgia and Tunisia, this element was more focused on product-based events, this notion is unfamiliar in the Egyptian Context and has been recently introduced only for dates 3 years ago. However, given how the Egyptian culture affiliate food with celebrations and dates dates events, this criterion is assessed on such basis, whether the production or consumption is related to religious or cultural ceremonies and/or festivals such as harvest harvest festival such as the cotton harvest festival in all Egypt during October and also the palm dates and olive harvest festival during the same month in Siwa Oasis.

## *2) Assigning weights to identification criteria and assessment criteria*

Both typicity and historical anchoring to territory are assigned equal weights of 25%. The collective dimension and link to local culture is assigned 20%. Given that a major aspect of terroir food products is linking its physical characteristics and know-how to the area/region/country, the criteria of physical anchoring to territory is assigned a weight of 30%. This sums the assigned weights to 100%.



Each identification criterion weight is distributed over the assessment criteria unevenly, except for the collective dimension criteria. The assigned weights of the assessment criteria is shown in figure 5 and in Annex 5.

### 3) Putting down the scoring scale and the corresponding grading scale

Each assessment criterion is evaluated against a score from 1 to 4, with 4 being the highest and 1 being the lowest. The correspondent description of each level per assessment criteria is shown in the evaluation grid in annex 4.

As for the grading scale, each score level was translated into a grade with the score of 1 translated into a 0 and the score of 4 translated into the full weight grade of the assessment criteria being scored. For instance, the historical anchoring grading scale is as follow:

- > If the product exists for less than 60 years, it scores 1 and the correspondent grade is 0
- > If the product exists for more than 500 years, it scores 4 and the correspondent grade is 25, where the historical anchoring contribution to the identification criteria is weighted against 25%
- > If the product exists between 60 to 200 years, it scores 2 and the correspondent grade is 17.5
- > If the product exists between 200 to 500 years, it scores 3 and the correspondent grade is 22.5

The grading scale for the remaining identification criteria is provided in Annex 5.

### Scoring the mapped products

The initial scoring of the mapped products was conducted by the project team in collaboration with academic sectoral experts, particularly for the categories of vegetables, legumes and tubers, fruits and tress, and herbs and spices. This is mainly to bring the scientific research insights on the physical characteristics and quality uniqueness.

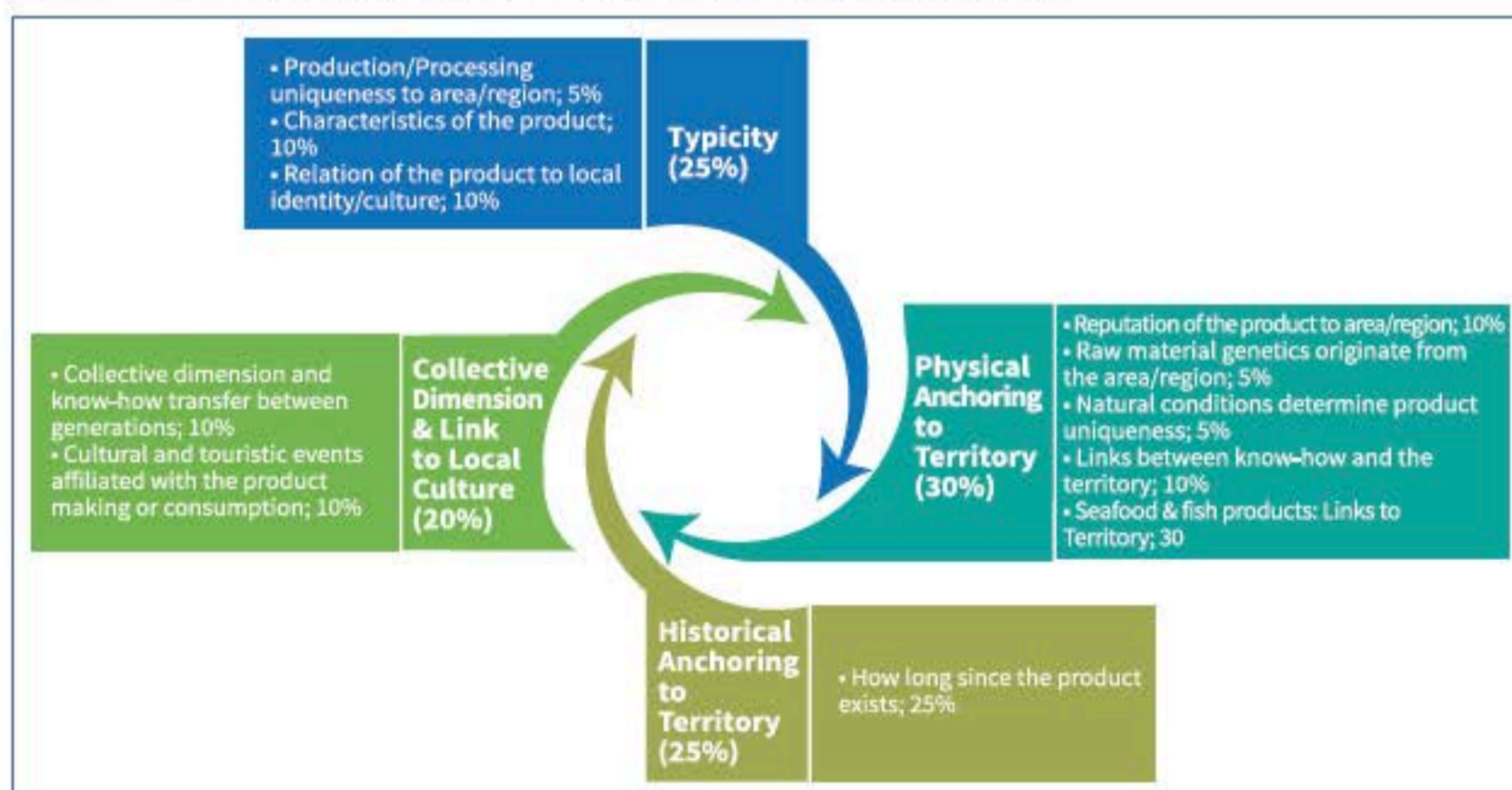


Figure 5 : Terroir products identification criteria weights and assessment criteria sub-weights



## VALIDATION WORKSHOP

Four validation workshops were planned in Alexandria, Fayoum, Aswan and Damietta to validate the product list and the scoring put per products. Except for Sinai region, the 4 workshops were intended to cover all governorates such that<sup>4</sup>:

- > Alexandria: North Coastal and north delta governorates
- > Fayoum: North Upper Egypt governorates
- > Aswan: South Upper Egypt governorates
- > Damietta: Delta and Canal governorates

The validation workshops were designed as a participatory tool to ensure involvement of local community, business associations, local producers and academics and bring diversified insights to the evaluation.

The validation workshops had 3 main objectives:

- 1 - Enrich the initially identified lists with more traditional food products that could be potential for terroir products.
- 2 - Validate the scores that were put by the project team.
- 3 - Score the products that did not have enough information to be scored prior the validation workshop.

Both Alexandria and Fayoum workshops were conducted at the 1<sup>st</sup> week of March 2020. Twenty-Six participants attended the Alexandria workshop and products of 4 governorates were validated; 40 participants attended Fayoum workshop where also products of 4 other governorates were validated.

The Damietta and Aswan validation workshops were planned to take place by mid-March; however due to the coronavirus outbreak that followed, they were cancelled. To validate the products of the remaining governorates, these two validation workshops were replaced by virtual focus groups using an online meeting tool.

Damietta validation focus group took place over two sessions with each session taking 3 hours. The participants included sector experts, academics, chefs and food experts originally from Delta. During Damietta workshop, products of 10 governorates were validated.

As for Aswan validation focus group, it took place over 1 session that extended to 3 hours. The participants were mainly academics, as we were challenged by accessing food experts and chefs from the region due to schedule conflict. 5 governorates products were validated.

<sup>4</sup>All governorates of Egypt were covered in the validation workshops except for North Sinai, South Sinai and Red Sea.





*Alexandria Validation Workshop*



*Fayoum Validation Workshop*



*Delta Validation Virtual Workshop*



*Aswan Virtual Validation Focus group*



## TRADITIONAL FOOD MAPPING OUTCOMES & TERROIR IDENTIFICATION

As highlighted earlier, the data collection stage aimed at providing a database of traditional food products; the scoring stage focused on shortlisting terroir products from this list and the validation stage verified the outcomes of the scoring stage and enriched the traditional food products database.

After the scoring of the traditional products and validation, products which exceeded the threshold of 50 are identified as Terroir products. It is worth noting that, if the product exists for less than 60 years; this is considered as an exclusion criterion from the terroir list. The below figure indicates the numerical outcomes of mapping database and the validation stages.

Stage	Outcome	Number
Data Collection (1st Stage Mapping)	Traditional Products	364
Validation & Scoring (2nd Stage Mapping)	Removed Products	57
	Newly Added	283
	Total Traditional Products post validation	= (364+283-57) = 590
Terroir Product Identification	Terroir Products (scored above 50)	426
	Excluded (since they exist for less than 60 years)	19
	Not scored due to insufficient information	92
	Not Terroir (as they scored less than 50)	53

Table 1 : Mapping Outcome

The 426 identified Terroir products historical classification is shown in figure 6, where 300 products exist for more than 500 years, 80 for 60 to 200 years and 46 between 200 and 500 years. Moreover, they are classified in figure 7 by the different products categories. The product list is dominated by fruits and trees which constitutes more than 50% of the identified terroir list, mainly due to the contribution of Egyptian Dates across all Egyptian governorates. The 2<sup>nd</sup> category is vegetables, legumes and tubers, constituting 16%, followed by grains and breads accounting for 9%.

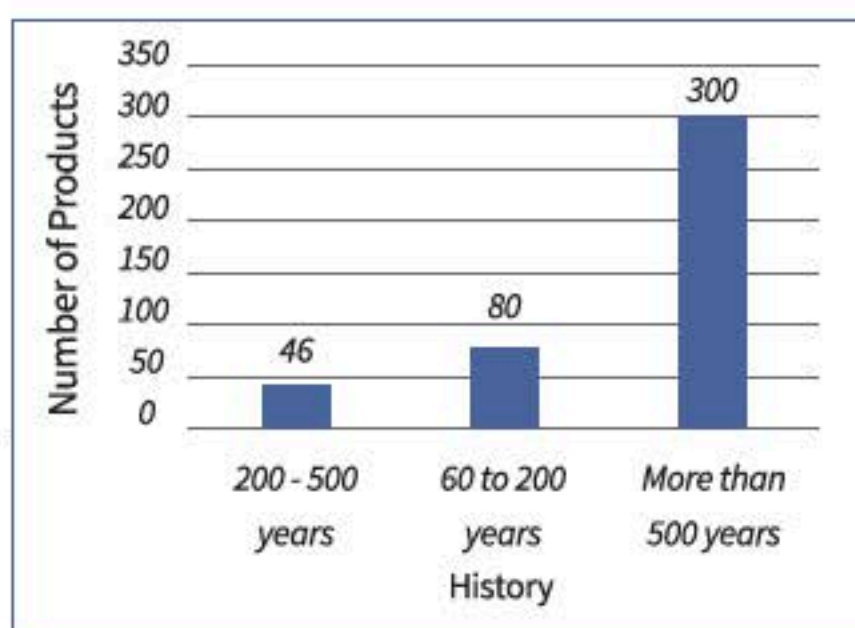


Figure 6 : Historical Classification of identified Terroir Products



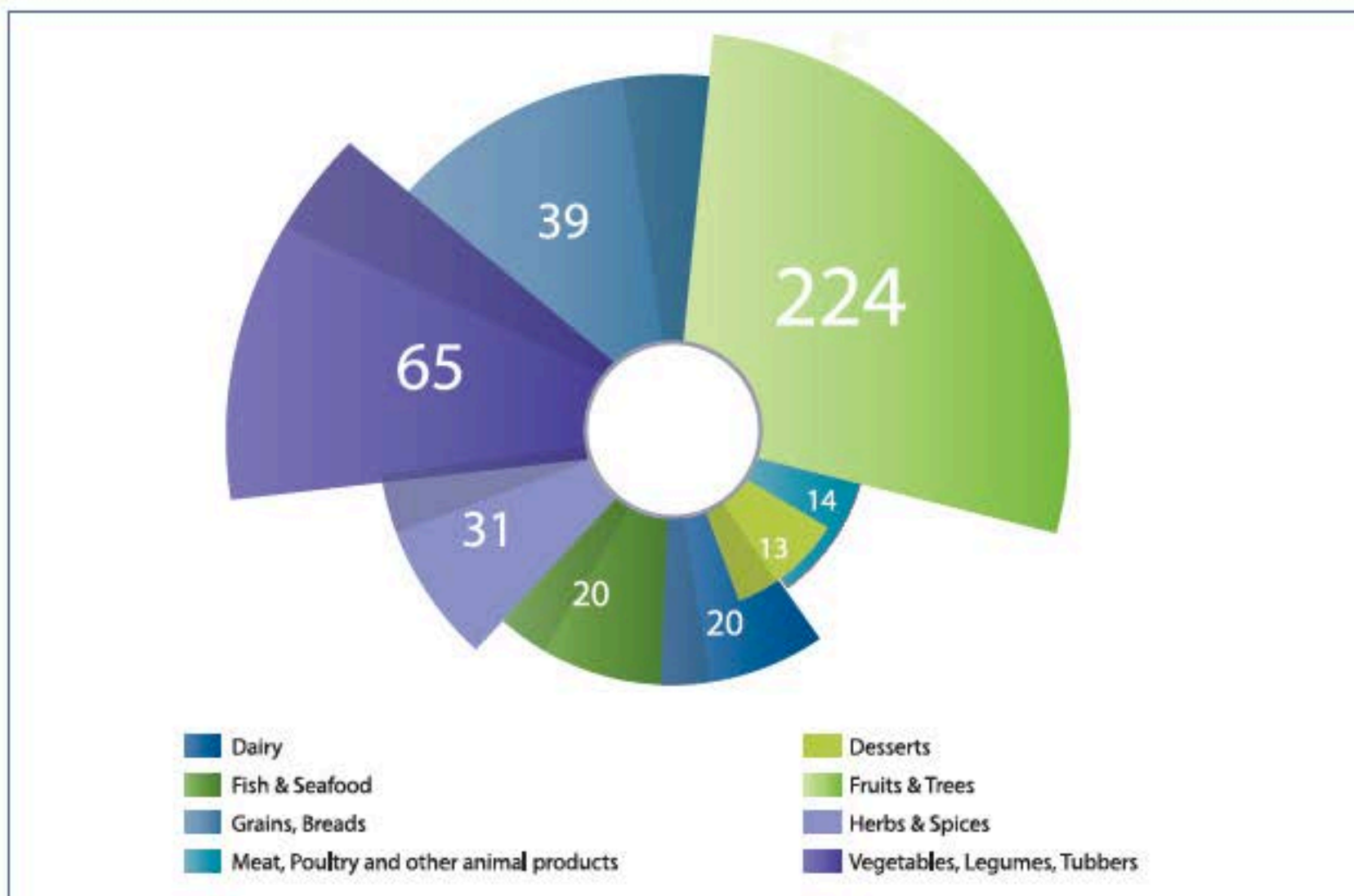


Figure 7 : Terroir Products Classification by Category in Number

The territory with the highest terroir products is Siwa oasis with 47 products, where the landscape is flooded with palm dates of unique endemic varieties and olive trees with local landraces, in addition to possessing an extensive local know-how in both cultivation and food processing that has been affected by the authentic cultural roots of locals in Siwa and is being transmitted and preserved by the line of generations.

Twenty terroir products are identified over all Egypt with no specificity to certain governorate or region. In addition, 14 products classified over Upper Egypt and 13 over Delta region. Minya is the highest Upper Egyptian governorates (26); while Sharqeya has the highest products number in Delta region (19). The following chapter provides illustration of a chosen sample of identified terroir products by category.



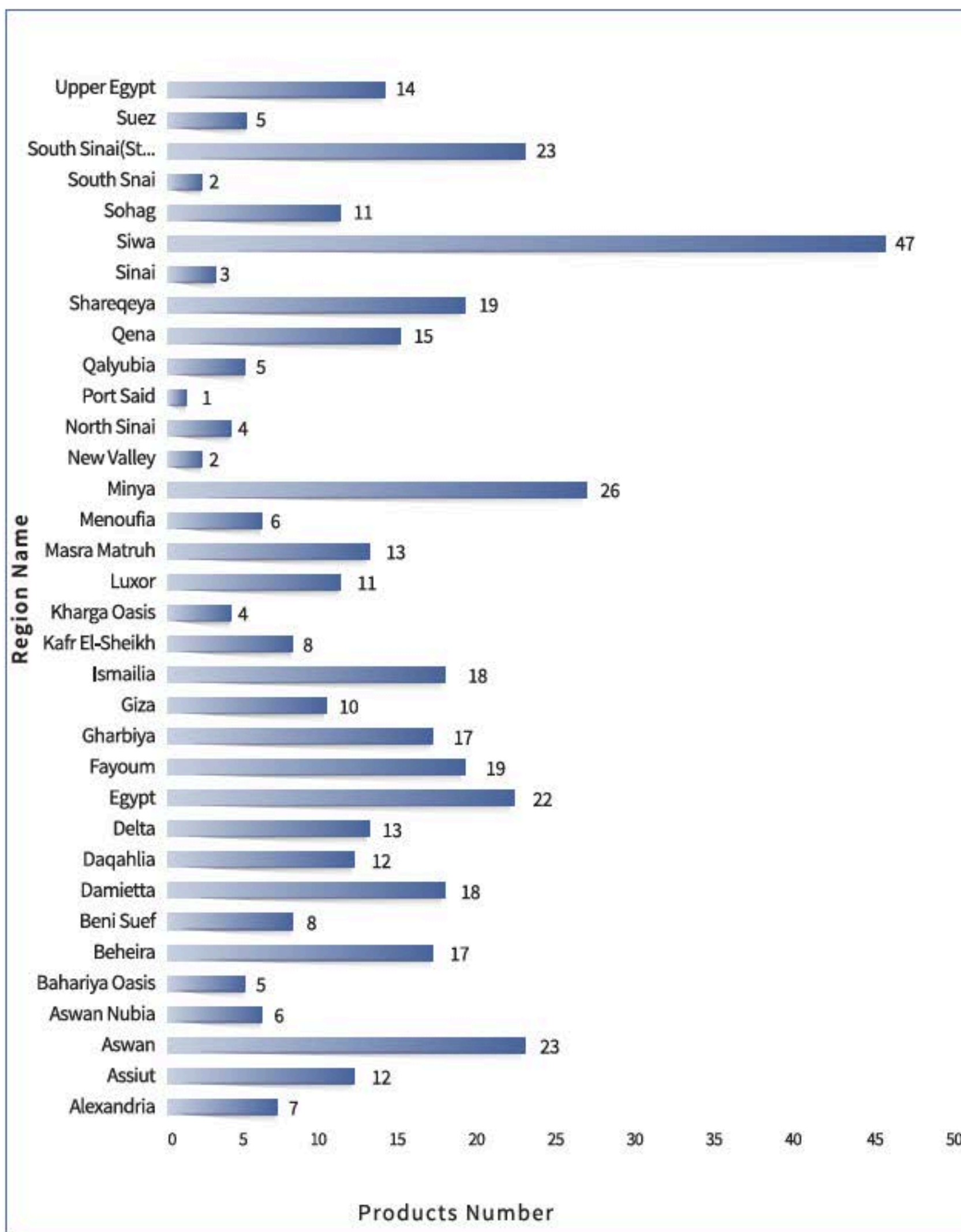


Figure 8 : Terroir products Classification by Region/Governorate/ Area



## TERROIR PRODUCTS SUMMARY

### Dairy

Dairy has been essential to Egyptian food since at least pharaonic times. Most dairy products that exist today have a provenance that goes back hundreds if not thousands of years. Because of the essential role of cows and buffaloes in the small-holder farm mix and of sheep and goats in transhumance and mixed systems, many of these products can be found across Egypt. Here we cover some of the most notable products with the greatest potential for valorization. Where applicable, we highlight the regions that have the greatest reputation for distinctive production. The main products of note are Samna, Areesh Cheese, Rumi Cheese, Kishk, Damietta Cheese, and Mish.

#### **SAMNA**

Samna has been an essential cooking fat for millennia. The year-round warm weather made butter difficult to store prior to modern refrigeration because the protein solids and water content lead to rancidity. Instead, Egyptians have converted it to a form of clarified butter similar in production technique to the ghee of the Indian subcontinent. In fact, colloquially, especially in rural areas, the words for butter (zebda) and ghee (samna) are often used interchangeably. The particular technique continues to simmer the butter after the solids have separated, browning them in the process. This byproduct, called morta, is used sparingly as a rich savory spread or condiment. The process also



leaves the samna with a rich, nutty flavor not found in regular clarified butter. Samna can be made with any kind of milk or a combination. Most commonly it is made with either buffalo or cow milk, which are white and yellow-tinted, respectively.

Malawi Ghee is particularly noteworthy because it is a major dairy production area with large areas of land dedicated to growing clover and other feed for, primarily, buffaloes. This is used in producing Malawi cheese, also highlighted here as well as ghee and other dairy products. Ghee production is mainly home and mini factories based, and its processing know-how is transmitted from one generation to another. No cultural events or festivals are held to promote for ghee production.

#### **WHITE SAMNA**

Some regions, such as in Menoufeya and Sharqeya, take particular pride in their 100% buffalo butter/samna which they call white butter. The production of white butter, especially in Menoufeya, is clustered. The uniqueness of the white butter in this region resides in





the high quality of the animal feed of the buffaloes which results in a higher quality milk and butter. The special knowledge to processing this type of butter is transmitted from one generation to another.

#### **AREESH CHEESE**

Areesh Cheese has been produced all over Egypt for hundreds of years. Areesh is a fresh curd cheese, like cottage cheese, with a mild flavor that varies depending on the milk and the process used; Areesh can be made from a variety of milk products including buttermilk, fermented milk, or skimmed milk.



The production of Areesh cheese varies from small-scale homestead production to industrial production. There are no cultural events or festivals that are held to promote for Areesh cheese in Egypt.

Most commonly, the processing of Areesh cheese happens when the buffalo or cows' milk is poured directly into a special earthenware pots known as "Shallia or Zeer" with a capacity of about 4-7 kg. the pots of milk are kept in a suitable place so that the fat may rise and form a surface layer and the milk underneath may sour and clot. After removing the cream layer, which is formed within 24 to 36 hours during summer and from 2 to 3 days during winter, the curd is poured onto a reed mat. After a few hours, the ends of the mat are tied together to permit a portion of the whey to drain. This process of spreading the curd, then squeezing it in the mat is repeated once or twice. Finally, the mat is hung from the joined ends in order to complete the drainage of whey. Draining of the whey takes two or three days, or until the desired texture of cheese is obtained. Finally, cheese is cut into suitable pieces, then dry salted to taste. The salted cheese is left for a few more hours in the mat until no more whey drains out and is then ready to be consumed as fresh cheese.

#### **DOMIATTI CHEESE**

Domiatti Cheese has been produced in Damietta for more than 200 years. Domiatti cheese is a soft white pickled cheese. "Domiatti cheese has a distinctive flavor, it is mild and rather salty when fresh. As the cheese ages it develops considerable acidity.



At 12 months or older a pungent flavor similar to that of Mish cheese develops and is accompanied by a change in color from white to light brown. Fresh Domiatti cheese has a soft body. As it ripens in the pickle' the body usually becomes firmer up to the third month of age after which it mellows, mainly as a result of protein breakdown. It possesses a close texture with no holes; as ripening proceeds it becomes lightly flaky and is brittle rather than elastic when broken." (Abou-Donia 2008). The production of it varies from small-scale homestead production to industrial production. There are no cultural events or festivals that are held to promote for Domiati cheese in Egypt.



milk and butter. The special knowledge to processing this type of butter is transmitted from one generation to another.

#### **MISH CHEESE**

Mish cheese is a processed dairy product that has been produced in Egypt since at least the Medieval times. When ripe, this cheese has a yellowish-brown color, and it tastes sharp, salty and pungent. The processing of this type of cheese is conducted by households and by factories to further be sold in the market. Culturally, there is no special event to eat mesh cheese, however, it is mostly eaten with feteer which in some governorates is served in weddings and parties.



Mesh cheese is made by fermenting salty cheese for several months or years. At home, mesh cheese is usually made from Areesh cheese. The cheese is drained, rinsed and layered with salt in an earthenware jar. The jar is then filled with pickling solution of buttermilk, sour skim milk, whey, red and green peppers. Some old mesh is added to start the fermentation. The sealed container is then left for a year or more at ambient temperature, the container may be opened so that some can be removed for consumption, and fresh cheese and other ingredients added, so there is no particular limit to the age of mesh.

#### **MALAWI CHEESE**

Malawi Cheese has been produced in Malawi village in Minya for at least several generations. This sort of processed cheese is fully made of buffalo milk; It is white; It tastes sour and creamy. Malawi cheese is unique because it only exists in Malawi village and it is the only cheese in all of Egypt that is fully made of pure buffalo milk. This product is produced in mini dairies that operate in the informal sector. There are no cultural festivals that are held to promote for the production of Malawi cheese. Malawi cheese is a processed product with a special processing know-how that is transmitted from one generation to another and is only known by the few people who are producing it in Malawi, Minya.

#### **RUMI CHEESE/RAS CHEESE**

Rumi cheese is a hard-yellow cheese whose reputation is generally associated with Alexandria, where it is called Gebna Turkey (Turkish Cheese, as opposed to Rumi = Roman/Greek). While its origin is likely linked to the Mediterranean inhabitants of Alexandria, it is actually produced in the areas outside of Alexandria in Beheira, one of the major cattle bearing regions.



It is one of the most famous cheese types in Egypt. It has a pungent aroma, and different degrees of sharpness and saltiness depending on the age. Rumi cheese is made from cow's milk or a combination of cow's and water buffalo's milk.



The production varies from small-scale homestead production to large industrial production. There are no festivals that are held to promote for Rumi cheese, and the consumption of the latter is not related to specific traditions or cultural events.

## KISHK

Kishk is a very old food, the many forms of which range from Egypt through the Levant to Turkey and Iran. The term may refer to a grain-based bread or gruel, dried soured milk or yogurt, or, as in Egypt since at least the Medieval period, a combination of both parboiled wheat and sour milk.<sup>5</sup> From a food heritage and nutrition perspective, kishk is particularly noteworthy for its preservation of animal and plant carbohydrates, proteins, and fats from the wheat harvest and clover-fed milk season for use during the remainder of the year.<sup>6</sup>

Kishk is produced by first collecting soured milk over several days (within a household framework). Parboiled, dried and crushed wheat grains are added to the soured milk to ferment for several more days depending on the weather conditions. Once the gruel has fermented sufficiently, it is formed into balls or disks and put out to dry in the sun. The balls can be stored for many months in ambient temperatures and much longer in the fridge. While there are no particular cultural events, it is an important seasonal activity that is undertaken by groups of women, that pass on the know-how through these collective activities.

Because it is essentially a wild fermentation, different regions produce different flavor profiles during the two fermentation processes. While most kishk is made of one or both of buffalo and cow milk, there are regional variations that use other milks, primarily sheep and goats milk used by the bedouins of the Western Desert. In addition, different regions tend to have different spices combinations that they add to the mix, such as chili, fennel, and nigella seed to name a few. There is also some variation between households that may be affected by not only the ambient micro fauna but also the quality of the milk used.

Our study highlighted a number of key regions that are known for or take pride in their distinctive or high-quality kishk production. Kishk in the form discussed above is often referred to as Kishk Sa`eedy (Upper Egyptian Kishk) to differentiate it from other yogurt or sour milk-based recipes often used in the Delta and cities. Minya is the most notable of the areas for producing Kishk Sa`eedy. Sohag and Wahat Bahareyya also showed up in the inventory. Several other areas remain unscored for lack of information and so may also prove to have distinctive features. Finally, we highlight kishk from Marsa Matruh which has two remarkable features. The first is that it made with sheep milk and the second is that in addition to wheat kishk, they also make a version that uses barley, which adds a sweet element to the sour, savory notes.

<sup>5</sup> For an early attempt to encapsulate the historical breadth of the linguistic and culinary uses of the term see: Aubaile-Sallenave, Françoise. 1994. "Al-Kishk: the past and present of a complex culinary practice" in *A Taste of Thyme: Culinary Cultures of the Middle East*. Eds Sami Zubaida and Richard Tapper. 105-139.

For information about how it was used in Medieval Cairo, see Nasrallah 2016. The *Kanz* unfortunately does not include a recipe for kishk balls, which are treated as a pantry item that is sourced from the countryside and used in several recipes.

<sup>6</sup> See Hassan-Wassef, Habiba. 2114. "Food Habits of the Egyptians: Newly Emerging Trends" *Eastern Mediterranean health journal = La revue de santé de la Méditerranée orientale = al-Majallah al-ṣiḥḥiyah li-sharq al-mutawassiṭ* 10(6):898-915. Dec 2014.



Kishk has been produced in Wahat Bahreya (Bahreya Oasis) for many generations. As kishk is a fermented product, it is affected by the climate and environmental conditions of the area it is made in, and because the climatic conditions of Wahat Bahareya is different than Upper Egypt, their Kishk is also unique than Kishk Sa'eedy (which is primarily because the yeast and bacteria formed differs based on the climatic conditions of the area in which kishk is fermented).

#### **KISHK SA'EEDY**

Kishk Sa'eedy has been produced in Sohag and Minya for at least 500 years. This type of kishk is solid, with a beige color and a salty taste. It is made of fermented buttermilk that is fermented again after mixing the paste with freshly harvested breeds of wheat that had been parboiled, dried and coarsely crushed. The mixture is cut up into small balls or unshaped nuggets and are sun-dried to be ready for consumption. In Sohag, it is especially unique because it is made of fereek. The knowledge to making it is transmitted from one generation to another. It is produced and sold in homes.



#### **BARLEY KISHK IN MATRUH**

This type of kishk is unique to the North Coast/Western Desert bedouins, particularly of Marsa Matruh and has been produced there for many generations. Like the traditional upper Egyptian kishk, it has a sour funky smell and a sour taste. The use of sheep's milk is evident in the taste as is the use of barley which makes it sweeter. The barley also means that its color is a darker grey than the common beige appearance. This product is unique in Egypt because it 1) uses sheep's milk instead of cow or buffalo milk used elsewhere; and 2) uses barley instead of wheat. The Kishk Barley is mainly home produced. The production is often done in large batches by groups of women, and its know-how is transmitted from mother to daughter. However, there are no cultural events or festivals that are held to promote for the production of Kishk Barley.

To make kishk Barley, milk is left to ferment overnight (in the summer) or for a couple of days (in the winter) in a special vessel that retains the live culture. The fermented milk is then churned vigorously in a jerry can. Traditionally, milk was fermented and churned in a container called an irbah (قربة), made from the salted and cleaned skin of a male goat. Once all the butter has been removed, the remaining buttermilk is strained through cheesecloth until it stops releasing any more liquid. The strained buttermilk, called gemeed (جميد), is stored for later use. When enough gemeed is ready, crushed barley (disheesha, دشيشة) is steamed. The gemeed is added so that the whole product is pre-cooked for the future. The combined crushed barley and gemeed are rolled into balls and placed in containers to dry and are covered with gauze or cheesecloth to keep out pests. This usually takes about 5 days in the summer and up to 2 weeks in the winter.



### AFEEG

Afeeg is a processed dairy product that was produced in Sinai Peninsula for at least 200-500 years. It is made from goat milk. When the rains are good and the goat milk plentiful, this is made with the buttermilk that remains after churning the milk to make butter. Thus, Afeeg is sour, earthy and has a buttermilk flavor. What makes Afeeg unique is that it is made of goat milk, which is quite unusual in Egypt. In addition, Afeeg is unique because goats feed on different pasture. In terms of production scale, Afeeg is home-produced “small scale production”.



This processed product depends on the rain because when the rains are good and the goat milk plentiful, this is made with the buttermilk that remains after churning the milk to make butter and its production know-how is transmitted from one generation to another.

### SAMN SHEEHY

Al-Samn El-Sheehy is a type of Ghee, which is a form of samna produced in South Sinai for more than 200 years. This product has a solid texture at room temperature; It is yellow with a tint of florescent green; It has a similar flavor profile to other goat milk products; And it has a certain floral, herbal sweetness from the Artemisia. The uniqueness of the product resides in it being increasingly rare. It is produced in years with good rains and plentiful grazing and is produced with Goat milk; which is another unique feature of the product since goat milk is somewhat uncommon in Egypt. The production of Samn Sheehy is home-based and small-scale dairy stores. The production know-how of the later is handed down through generations at such special events. This special type is usually produced in gatherings that are precipitated by good rains. To process the Samn Sheehy, the milk is churned into butter and then clarified. While it is being heated, herbs (mainly Artemisia herba-alba and A. judaica) are added to the butter, thus infusing the ghee with their sweet herbal essence.

## Meat, Poultry, and other animal products

Our inventory uncovered a number of noteworthy animal and meat items. There are a number of important breeds that are recognized for their adaptive characteristics. For sheep, the standout breed is the Barki sheep from the Western Desert. In poultry, we identified two breeds. The fayoumi (begawi) chicken, whose hardiness in hot, arid weather is well-recognized and has been used as a breeding stock in both Egypt and abroad and for which there has been a breeding station and stock management since the middle of the 20th century. The Dandarawi chicken is also a hardy breed. Both are mainly produced for home consumption or sale on local markets. We also note the Egyptian honeybee as being an important breeding stock for its good hygiene and pest resistance.



In terms of products, we have identified the beef jerky (gedeed / lahm moqaddad) of both Marsa Matruh and Siwa. In both cases, modern refrigeration has meant a turn away from this form of preservation. We believe that they would benefit from interventions to promote and valorize these products. Two other products stand out, both from Alexandria. Basterma is a cured meat that is characterized by the fenugreek and garlic-based paste that it is coated in while curing. Sodo' or sogo' is the Alexandrian sausage.

Finally, on the honey front, we realize that there is much more to discover on this front. Egypt has two main honey seasons: the citrus harvest in the spring and the clover one in the early summer. But there are also a number of other shorter seasons as well as very specific honey types that are not well-documented. We believe that this is a sector that would particularly benefit from a national program to identify, taste, rate and otherwise highlight the rich diversity of flavors available.

#### **BARKI SHEEP**

Barki sheep have been raised in Marsa Matrouh for more than 60 years. They are a small to medium-sized multi-colored breed. The Barki sheep is one of the three main breeds in Egypt. They are sold at the farmgate and in the local markets. In the western desert, bedouins tend to group their animals into large stocks to be collectively managed in flocks up to a few hundred heads. Individually owned flocks can be relatively large; up to 2000 heads not including other livestock. Closer to the Nile Valley, flocks tend to be much smaller as land holdings are smaller.



There is no national breeding program for Barki sheep although the breed got the attention of the academia since research has been conducted by various universities and national research centers on that specific breed. Previous attempts to cross breed with imported breeds of higher prolificacy were not successful. However, all breeds in Egypt are susceptible to genetic dilution due to individual attempts to improve breeds, often through the use of imported rams intended for slaughter<sup>7</sup>.

#### **FAYOUMI BEGAWI CHICKEN**

Begawi Chicken is a breed of chicken from Fayoum that is believed to be many centuries old. They have a distinctive look characterized by a dark slate blue plumage. Unlike commercial breeds, they retain a strong, almost gamey, chicken flavor. The eggs are smaller, but also more flavorful than commercial chicken eggs and tend to have a darker, more orange yolk due to its propensity for roaming and pecking. They are known for their disease resistance and tolerance for hot and arid weather and have been used as breeding stock both inside and outside Egypt. In Fayoum, as well as other parts of Egypt, they are produced on a small scale, primarily by women, and are sold in the local markets.





### DANDARAWI CHICKEN

Dandarawi chicken are believed to have been raised in Qena for centuries. They are a semi-feral breed; they are small in size, and they are known to be alert and active. This is an auto-sexing breed, meaning that males and females hatch in different colors. “The hens hatch with dark spots on their heads and can be differentiated from the males when they are just one-day old. Dandarawi roosters are black with white hackle and saddle and some white on the body and wings when grown.

The hens are Wheaten-looking, reddish-brown, or grey, with a small, backward facing crest. Dandarawi chickens have a double-bladed single comb, red earlobes and yellowish-white feet and legs. Some red feathers in the rooster’s body and white in the earlobes are common too”.<sup>8</sup>

They are disease resistant and heat tolerant. Also, they are fair layers of eggs (140-160 eggs per year). This breed is raised primarily by small-scale producers for home use or sale on local markets .



*The Dandarawi hen*



*The Dandarawi rooster*

### EGYPTIAN HONEYBEE

Egyptian honeybee has been raised in Egypt for at least 500 years; since the ancient Egyptian and roman times<sup>9</sup>. These bees are solid, their color is shining white, they have ‘silvery’ hair on the thorax and abdomen stripes and bright copper-yellow bands with shining black margins on the abdomen. This breed is very small and slender, as is characteristic of sub-Saharan races, and has a short tongue, short wings, and short legs. Also, they are considered defensive, low in honey yield, and exhibiting good hygienic behavior.



<sup>7</sup> See Elshazly and Youngs 2019, Othman et al 2016, Hanafy et al 2012

<sup>8</sup> <https://www.domesticforest.com/dandarawi-chicken/>



### **BASTERMA**

Basterma has been produced in Alexandria for at least 200 years. It is a cured meat product that can be made with beef, buffalo or even camel meat. In addition to the rich, deep umami flavor, basterma's taste profile is affected by the fenugreek and garlic-based paste with which it is coated. There are three main steps to processing basterma: salting, pressing, and drying and ripening. It is an everyday meat which can be eaten alone, in sandwiches, cooked with eggs, to list a few uses. Basterma is produced on small and large industrial scales, and it is sold in local markets, urban bazaars and markets, shops and minimarkets, online shops, retail chains and hotels.



### **QEDID MATROUH**

Qeidid has been produced in Marsa Matrouh for at least 500 years. This cured dried meat has a jerky-like consistency. It has a full, rich umami flavor and a spice profile that highlights turmeric.

In the past, the production of qeidid in Marsa Matrouh was tied to the seasonal culling of the sheep and goat flocks. However, today, because of refrigeration and urbanization, meat is accessible all year long and doesn't



need to be dried for preservation. Thus, it is more likely for qeidid to be produced for gastronomical reasons rather than preservation; they resort to this method of preserving the meat for Ramada, the Islamic holy month .

It is produced by cutting the meat, usually sheep or goats meat, into cubes or strips that include bits of fat. These pieces are rolled in a mixture of finely ground salt, bzar, and turmeric. They are stored in a well-ventilated container and should be ready in 10 days in the summer and longer in the winter. Like much of the Matruh bedouin cuisine, turmeric is a key element, which makes it unique and different than the qeidid produced in Siwa. Also, this type of qeidid only exists in Matrouh. Additionally, the meat used is from the local flocks which include the barki sheep, a particular breed local to Matruh. The production of qeidid in Matuh only taked place on a small scale, and it is only sold through personal networks.

### **QEDID SIWA**

Qeidid has been produced in Siwa for at least 500 years. To make it, the Siwan people get the fresh meat and mix it with solid salt. Then, they place it to dry in the sun for a week or two and they preserve it in clay pots or glass jars. This processing method of meet is a family tradition, and its knowledge is transmitted from one generation to



<sup>9</sup>[https://jaauth.journals.ekb.eg/article\\_47990\\_882687660670d76346cdfda54f7b3e20.pdf](https://jaauth.journals.ekb.eg/article_47990_882687660670d76346cdfda54f7b3e20.pdf)



another. Qedid is mostly related to the sacrifice holiday (Eid Al-Adha) because they Egyptians and Muslims slaughter livestock during that holiday, therefore they resort to this processing method to preserve the meat. In Siwa, qedid is usually made from lamb. The production of the latter is home-based as well as its consumption.

#### ALEXANDRIAN SODO'/SAUSAGE

Soodo' has been produced in Alexandria for more than 60 years. It is sold in common markets, locally named Be'ala. It is made by mixing ground beef with spices, then placing the mix in a clean cow's intestine case and tied. It is left to dry in the air, away from sun, for at least 3 days.



## Fish and Seafood

Fish and seafood have long been an element of Egyptian cuisine. The coastal cities take great pride in their seafood culinary heritages. But freshwater fish have also always been a key element of the culinary repertoire. In the Delta region, the lakes and marshes, particularly prior to the building of the dam, were home to all manner of seafood that like so much else, reflected the rhythm of the Nile flood, hosting freshwater fish when the flood flushed them out and then gradually shifting towards salt-water ecologies over the course of the year. The products we feature here are all preserved using a variety of methods, from salting to fermentation.

#### FESIKH

While many of the products featured here are specific to the culinary heritage of some or all of the coastal regions, fesikh is much more universal. It is an important element of Sham El Nessim, the ancient Egyptian spring festival that is still celebrated today on the Monday after eastern Easter. It is commonly eaten with spring onions, lime, olive oil, tahini, and other ingredients.

The production of fesikh is mostly conducted on a small to medium scale by fasakhanis (the producers of fesikh) and households. Because of the risk of botulism, fesikh production is usually left to the experts that have reputations to protect and who pass on this expertise within family owned businesses. It is made using grey mullet, buri, of the genus mugil that lives in the Mediterranean and the Red Sea. The most prized fesikh is made with fish with roe. The fermentation process produces extremely funky notes, similar to those of European washed rind cheeses. It is not for everyone and does take getting used to. Our inventory has identified at least four centers of reputed production: the town of Nabaro in Daqahlia, Rasheed (Rosetta) in Beheira, Damietta, and Kafr El Sheikh.





### **BATAREKH/BOTTARGA**

Batarekh, cured mullet roe, is a greatly valued delicacy. It has been produced in Egypt for centuries and has been thought of as a food of high society since at least Medieval times<sup>10</sup>. It is particularly popular in Damietta where it is produced as it is also in Port Said, which shares much of Damietta's food culture. The roe sacs are extracted, massaged to remove air pockets and then salted. It is then left to cure for several weeks.



Known as the Egyptian caviar; batarekh has a savory, briny and slightly bitter taste of the sea like caviar, but with a drier and more crumbly texture. The production of Batarekh is mostly done in small-scaled family owned workshops and stores, though it can be produced at home. There are no cultural events or festivals related to the consumption of Batarekh.

### **MLOOHA**

Mlooha is a fish and seafood product that has been produced in Assiut for at least 500 years. Mlooha is processed in a manner that is similar to fesikh, which gives it a very salty taste and funky smell. The main difference that renders it unique is that it produced with only one kind of fish called Kelaby in Arabic (tigerfish, *Hydrocynus forskahlii*). Its weight ranged between 0.5 kg and 2 kg, and it determines to a great extent its quality; the ultimate quality weight of the fish is between 1 to 2 kg. The production of Mlooha is mostly done in small-scaled enterprises and it can be produced at home.



Like fesikh its consumption Mlooha is mainly related to the Easter festival.

### **SALTED MOZA**

Salted Moza is a type of fish that has been produced in Marsa Matrouh for more than 200 years. Salting is a preservation method that works with most relatively small fish species. The Bedouin usually use moza (bogue) because it is relatively cheap and locally available, fresh from the sea. To make the salted moza, the fish are rinsed, the skins removed, and the stomach opened. The guts should have shrunk into a shriveled black strip that can be pulled out in one go. Served with a pico de gallo-like salad of tomatoes, onions, green peppers and lime. After processing the fish, it becomes salty, fishy, rich umami and seafood flavored. The product is home produced, and the production know-how is transmitted between families.

<sup>10</sup> Nasralla 2016, 610, 616



#### **SOROMBAA- DRIED**

Sorombaa is a fish and seafood product that has been produced in Suez for more than 60 years. Sorombaa is a type of shellfish with a gelatinous body, which is then dried in the sun or in an airy space depending on the season, to turn into a tough salty snack or food that is similar in texture to meat jerky. Sorombaa is produced by small scale artisans, and is sold everywhere in Suez; in Kiosks and small stores. The uniqueness of Sorombaa is based on it being rare and primarily produced in Suez and not elsewhere. As for the cultural features of Sorombaa, the product is considered as one of the most popular foods in Suez, but its consumption is not related to specific events of the year, and no festivals are held to encourage its production on larger scales.



#### **SOROMBAA - FRESH**

Sorombaa is a fish and seafood product that has been produced in Suez for more than 60 years. Sorombaa is a type of shellfish with a gelatinous body, which is eaten fresh. Sorombaa is produced by small scale artisanal, and is sold fresh everywhere in Suez; in Kiosks and small stores. The uniqueness of Sorombaa is based on it being rare and primarily produced in Suez and not elsewhere. As for the cultural features of Sorombaa, the product is considered as one of the most popular foods in Suez, but its consumption is not related to specific events of the year, and no festivals are held to encourage its production on larger scales.



#### **STREDIA - FRESH**

Stredia is a type of shellfish that has been sold in Suez for more than 60 years. They are gathered from the sea, boiled fresh to open and are served in plates after adding spices and lemon to them.



#### **LOGZ**

Logz is a type of shellfish that has been sold in Suez for more than 60 years. it is a shellfish that lives in the Red sea, caught by fishermen and sold fresh in local markets. To eat the Logz, the shellfish is boiled, then you break the shell and extract the meat and it can be eaten directly. Others might grill it or add it to seafood soup.





## GRAINS AND BREAD

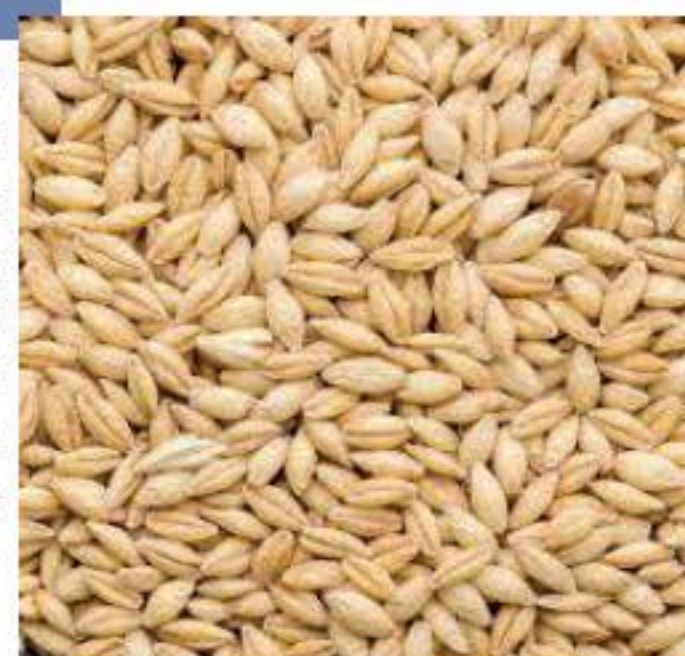
### ABAREYA BREAD

Abareya bread has been produced in Nubia (Aswan) for more than 200 years. It is dried and crumbly, it is baked on Doka, a kind of oven, and it is not eaten as such, rather soaked into water to make the Abareya drink. The knowledge to making abareya bread is transmitted from one generation to another, and it is limited to the Nubian village inhabitants. Abareya is associated with the Holy Month of Ramadan as Nubian people drink it during Iftar because it lowers blood pressure and relieves thirst. The production of Abreya bread is home-based.



### BARLEY MATROUH

Barley Matrouh has been produced in Marsa matrouh for at least 500 years. The product is solid, gold colored and it has a sweet herbal smell. Barley is used in non-alcoholic drinks and local beers. It is added to various grain products either as a supplement or replacement of wheat. Some examples include barley couscous and barley kishk, both also in the inventori. It is produced on a small scale, consumed in local markets and its relevant knowledge is transmitted from one generation to another.



### BARLEY COUSCOUS

Barley Couscous has been produced in Marsa matrouh for over 500 years. It has a similar mouthfeel to wheat couscous, but with a richer and sweeter profile. Barley couscous is unique because it is made of barley flour instead of wheat flour in Marsa Matrouh. In the rest of Egypt, couscous is made from wheat flour and is usually eaten sweetened. The knowledge to barley couscous processing is transmitted between women, it is produced by households and sold in local markets and personal networks.

### EGYPTIAN RICE

Egyptian Rice has been produced in Kafr El- Sheikh for at least 500 years. It is a small short grain rice; It has a milder flavor and a more soft and delicate texture than other types of rice. Rice is a staple of lunch and dinner meals in most of Egypt, particularly in the cities and Delta. While there is some small-scale production, most rice is produced and traded as a commodity. It is primarily farmed in large plots and the post-harvest activities are carried out in large factories.



<sup>10</sup> Nasralla 2016, 610, 616



### WAHI RICE

Wahi Rice has likely been produced in Wahat Bahareya (Bahareya Oasis) as well as other desert oases for hundreds of years.<sup>11</sup> This type of rice is essentially brown rice, unpolished and containing the bran, which gives it a rich, nutty, and earthy flavor. It requires a long cooking time and it is suitable for risotto-like dishes. This rice is usually served in weddings and big feasts, cooked in the fat of lamb or other meats. It is sold in local markets, shops, and minimarkets. For the most part, rice is no longer grown in Bahareya due to the fastdeclining water table in the Western Desert. As recently as 2013, most production had shifted to Farafra, where production was also in decline as of 2018.

### FARASHIH

Farashih has been produced in Sinai for more than 200 years. It is soft, pliable, slightly stretchy paste that has a mild smokey taste since it is made over firewood. Farashih is used to make Bedouin fatta in Sinai. What makes the product unique is that the ingredients used are very simple: wheat flour, salt, and water. The flour used can either be white or whole flour. The dough is split into small balls, which are then put aside to settle and are flattened into a thin sheet. The sheet is then rested on a round iron hot plate over a woodfired flame. The hot plate has an upwards concave shape, similar to an overturned wok. The bread is cooked for a few seconds on either side. The know-how to making Farashih is taught from woman to woman in young ages. This sort of bread is especially important for Bedouins in celebrations and feasts. It is sold in the local markets; Shops & minimarkets and it is produced in homes or in the desert.



### FOSH/FAIESH

Fosh is a processed dairy product that was produced in Minya governorate for at least 200. It has a white solid texture; It has a sour taste and smells like yogurt. The uniqueness of Fosh is mainly due to the restricted geographical scope in which it exists; Fosh is only produced in Minya. It is produced on household-scale and is not merchandised. The processing knowhow of the product is transmitted from one generation to another, and there are no cultural events or festivals held to promote for the product.

### FAYESH SA'EEDY

Fayesh Sa'eedy has been produced in Upper Egypt for at least 200 years. It has a solid and rough texture, its color is brown to yellow, it tastes sweet and it smells baked. The Sa'eedy fayesh is made of flour and yeast. The knowledge aspect manifest in the production of the yeast. Moreover, the yeast characteristics differs from one place to another and highly impacts the taste of



<sup>11</sup> Nasralla 2016, 468 for a reference to wahi rice



fayesh. Fayesh Sa'eedy is important in weddings, festivals and in memorial services. It is sold in local markets, urban bazaars and markets, shops and minimarkets, Fayesh is produced on a small scale, mainly home based and in bakery shops.

#### **FETEER MESHALTET**

Feteer Meshaltet has been produced in Minya and Menoufia for at least several generations. Its history in Menoufia is bolstered by the Khedevi Ismail's fondness for the feteer made in Quesna that he consumed at his rest house. Feteer meshaltet has a beige colored solid texture. It has a rich, buttery, slightly sweet flavor and an aroma to match. Lore has it that croissants were



inspired by the technique. The product is made in the same way throughout the country. The consumption of the product is associated with religious occasions and weddings; however, it is still consumed throughout the year and is a particularly hospitable offering. It is a touristic product. Feteer meshaltet is sold at the farmgate, local markets, online shops, hotels (for tourists), festivals and personal networks. The knowledge to making the product is transmitted from one generation to another. The production of the latter is small scales through enterprises and households.

#### **FREEK**

Freek has been produced in Upper Egypt for millennia. The wheat is harvested while the grains are yellow, and the seeds are still soft; it is then piled and sun-dried. The piles are then carefully set on fire so only the straw and chaff burn and not the seeds. The high moisture content of the seeds prevents them from burning. Now the wheat is roasted and undergoes



further threshing and sun-drying to make the flavor, texture, and color uniform. Freek is famous in Egypt as an alternative to rice that is consumed on lunch.

#### **FREEK EL DORA**

Freek El dora has been produced in Daqahlia and Gharbiya for at least a few generations. It is made of corn, which is roasted to give it a smoky flavor, and is then dried. It can be stored on or off the cob. After making it, it can be used in different dishes, such as: Spinach, kofta, and animal stuffing recipes such as the Fereek and liver stuffing of pigeons. Fereek is sold dried on the cob in local village markets. Fereek is consumed in Eid Adha "the sacrifice festival of Muslims" because it is used to make the rice kofta.

<sup>10</sup> Nasralla 2016, 610, 616



### **KHAMREET BREAD**

Khamreet Bread has been produced in Nubia, in Aswan, for at least 500 years. That type of bread is made of corn or wheat, It has a beige colored solid texture. Khamreet is also flat and thin that has a soft smell. It is an exclusively Nubian product and its knowledge is transmitted between generations; Nubian people make it in their religious occasions, especially Ramadan. They use an equipment for making it called Doka, which is a large griddle of iron or clay. The production of this sort of bread is small scaled, mainly home based, and it is sold in local markets and through personal networks.



### **MAKHROUTA/ MASROUDA**

Makhrouta (in Sohag) or Masrouda (in Menoufeia) has been produced for at least 500 years. The processing of the Makhrouta is conducted as follows: Add salt to the flour, then knead with water and form a fairly dry paste. Then strips are cut by lathe. Makhrouta can be made of corn or wheat. There is a similar product to Mkhrouta called Shaarya but the Makhrota has a softer texture which is why it is unique. Its knowledge is transmitted from one generation to another, its production is home based and it is sold in local markets, shops and minimarkets.



### **MEFATTALLA**

Mefattala has been produced in Sohag for more than 200 years. It is solid, beige colored, tastes sweet and salty, and it smells cooked. Mefattalla looks like belila, and it is mainly consumed during winter. It is made from raw wheat or freekeh, which makes it unique. To make it, the wheat is dipped in the flour and left for 2 days under sunlight. The knowledge to making it is transmitted between generations. It is produced on a small scale, mainly in homes, and it is sold in local markets and homes.



### **MEGARDAQ BREAD**

Megardaq Bread has been produced in Marsa Matrouh for at least 500 years. It is solid, beige colored, tastes savory, smells Herbal, and has a sensitive and smooth texture. Megardaq bread is unique because it is quick to prepare and not fermented but prepared in ovens underground. The production of this sort of bread is mainly home based, it is sold in local markets and homes and its knowledge is transmitted between generations.





### *MEGARRAN BREAD*

Megarran Bread has been produced in Sohag for at least 500 years. It is sweet and has a crispy mouthfeel. What makes it unique is that it is deep fried. The product is processed as it is made from flour that is kneaded with water, and its production knowledge is transmitted from one generation to another. Megarran Bread is produced on a micro scale and in homes, and it is sold at the farmgate.

### *SHAMSI BREAD*

Shamsi Bread has been produced in Upper Egypt for hundreds of years. Depictions of bread in funerary offerings in Pharaonic tombs are scored in a similar manner to that used for modern day shamsi bread. If indeed it is the same, then shamsi bread can directly trace its provenance to the first leavened bread in human history. This bread is a thick sourdough bread made with wheat flour.



In Upper Egypt, it replaces the national bread “Eish baladi” as the local bread, although the latter is common as well. The name, which translates to “sun bread”, is derived from the practice of letting the dough rise in the sun. The bread is traditionally baked at home in domed clay ovens with openings at the top, although this tradition is fading with pre-made bread becoming increasingly common. In some places, the bread is sliced into wedges which are dried and stored to be later re-hydrated.

### *BOUZA EL’OSAYRAT*

Bouza El’osayrat has been produced in Sohag for hundreds of years. Bouza is a liquid, white to beige colored that tastes sweet when you add sugar to it. It smells sweet. This drink is made of the finest types of flour, and its processing knowledge is transmitted from one generation to another. To make bouza, flour is mixed with water for an hour and a half and is then left together in a ventilated place for a whole day. The mixture is then diluted with water and sugar to be ready for consumption.



## FRUITS AND TREES

Egypt horticulture scene is dominated by multiple fruits and tree that have existed since ancient times and were found on tombs walls. Some of these fruits are native such as Dom and Dates palms and Persia and Sycamore figs.<sup>12</sup> Other fruits were introduced to the agriculture scenery due to trade between Egypt civilization and Canaan civilization such as grapes. Egypt's modernization during the 1800s enriched the basket of fruits and trees as Mohammad Aly introduced new trees and varieties such as mangos, oranges, kaki, mulberry amongst others.

Fruits consumption in Egypt is not limited to fresh ones; fruits are consumed in processed forms as dried, pickles and jams, not to mention juices. The processing step was initially made for preservation purposes; however, the distinction and the variation in flavor and characteristics manifested strongly with the combination of the know-how and the pedoclimatic conditions of the raw material cultivation.

The below list provide description with the top fruits that were identified as Terroir products and their different breeds, varieties and their sub-products. It is worth noting that there is still a vast room for enhancement in the database in terms of more information and/or more products particularly for the processed fruits, in particular jams and pickles.

Fruits and trees constitute almost 50% of the database of traditional products given the affiliation of breeds to territory/region. Upon scoring and validation of the products, some products showed prominent significance including palm dates (score: 96); followed by Olives, Doum, Grapes, Figs and citrus including: mangoes, oranges and lemons. Below is detailed description of some of these products.

### DATES<sup>13</sup>

Dates are considered a source of strength and fertility given that they are rich in nutritional value (Vitamins, amino acids, carbohydrates with high amount of sugars, water and minerals) and high calories (up to about 3000 calories per kilogram in deseeded dates). They represent a key energy source. Although dates can be eaten anytime of the year, there is a strong cultural value to dates because Muslims eat them in Ramadan (The Islamic Holy month) during Iftar and Sehur.

Date Palms are adaptable to a wide range of environmental conditions which is why data palms are cultivated all over Egypt for over 500 years. Cultivars vary between soft, semi-soft/semi-dry and dry dates. There are numerous cultivars of dates in Egypt varying from the very common ones, to the common date cultivars, the rare cultivars, the very rare cultivars and the endemic cultivars. The following is an exhaustive list of these cultivars referencing the Atlas on Egyptian Dates:

<sup>12</sup> <https://egyptmanchester.wordpress.com/2013/01/10/trees-in-ancient-egypt/>

<sup>13</sup> El-Sharbasy, Sherif Fathy, Rizk, Reda Mohamed. *Atlas of date palm in Egypt*. Food and Agriculture Organization of the United Nations (2019)



## VERY COMMON CULTIVARS

### 1. DATES, AMHAAT

Amhaat cultivars are widely spread throughout Giza Governorate and in some areas of El-Fayoum Governorate. The Amhat date is 3.50 ( $\pm$  0.28) cm long and 2.16 ( $\pm$ 0.04) cm in width. Its color is pale yellow and turns into brownish black when it matures. The moisture content of this fruit is high, and the fruit is suitable for consumption and marketing in the soft phase.



### 2. DATES, BARTAMOUDA

Bartamouda cultivars are mainly cultivated in Qena, Luxor and Aswan governorates. The Bartamouda date is 6.54 ( $\pm$  0.46) cm long and 2.00 ( $\pm$ 0.05) cm in width. Its color is yellow orange and turns into brown-red when it fully matures. Bartamouda dates are suitable for consumption and marketing at the dry phase. They can also be eaten at the semi-dry phase.



### 3. DATES, BENT EISHA

Bent Eisha cultivars are spread throughout Lower Egypt, especially in the governorates of El-Beheira (Rasheed and Idko), Damietta, El-Dakahleia and El-Sharqia. The Bent Eisha date is 3.96 ( $\pm$  0.36) cm long and 2.28 ( $\pm$ 0.05) cm in width. Its color is dark red and turns into black during the soft phase. Bent Eisha dates are suitable for consumption and marketing at the soft phase.



### 4. DATES, GARGOUDA-BEIDA

Gargouda-Beida cultivars are mainly found in Qena, Luxor and Aswan governorates. The Gargouda-Beida date is 4.18 ( $\pm$  0.40) cm long and 1.96 ( $\pm$ 0.04) cm in width. Its color is yellowish-red and turns into brown during the dry phase. Gargouda-Beida dates are suitable for consumption and marketing at the dry phase.





#### 5. DATES, GARGOUDA-BONI

Gargouda-Boni cultivars are mainly found in Qena, Luxor and Aswan governorates. The Gargouda-Boni date is 4.50 ( $\pm$  0.46) cm long and 2.14 ( $\pm$ 0.04) cm in width. Its color is yellow and turns into brownish-red during the dry phase. Gargouda-Boni dates are suitable for consumption and marketing at the dry phase.



#### 6. DATES, GONDILA

Gargouda-Boni cultivars are mainly found in Qena, Luxor and Aswan governorates. The Gargouda-Boni date is 4.50 ( $\pm$  0.64) cm long and 2.24 ( $\pm$ 0.06) cm in width. Its color is yellow and turns into brownish-red during the dry phase. Gargouda-Boni dates are suitable for consumption and marketing at both the semi-dry and dry phase.



#### 7. DATES, HAYANI

Hayani cultivars are spread throughout the governorates of Lower Egypt and Giza. The Hayani date is 5.40 ( $\pm$  0.66) cm long and 2.54 ( $\pm$ 0.14) cm in width. When the fruit fully matures, its color changes from shiny red to black. Hayani dates are suitable for consumption and marketing at the soft phase.



#### 8. DATES, MALAKABI

Malakabi cultivars are mainly cultivated in Qena, Luxor and Aswan governorates. The Malakabi date is 5.42 ( $\pm$  0.68) cm long and 2.38 ( $\pm$ 0.15) cm in width. When the fruit fully matures, its color changes from red to brownish-red during the dry phase. Malakabi dates are suitable for consumption and marketing at the dry and semi-dry phase.



#### 9. DATES, SAIDI

Saidi cultivars are widely spread throughout the New Valley governorate (i.e. Dakhla, Kharga, Farafra Oases). The Saidi date is 4.26 ( $\pm$  0.38) cm long and 2.44 ( $\pm$ 0.09) cm in width. When the fruit fully matures, its color changes from orange-yellow to brownish-yellow. Saidi dates are suitable for consumption and marketing in both the end of Khelal phase and the semi-dry phase.





#### 10. DATES, SAKKOTI

Sakkoti cultivars are mainly cultivated in Qena, Luxor and Aswan governorates. The Sakkoti date is  $4.70 (\pm 0.64)$  cm long and  $2.96 (\pm 0.04)$  cm in width. When the fruit fully matures and dries, its color changes from yellow to brownish-yellow. Sakkoti dates are suitable for consumption and marketing at the dry phase.



#### 11. DATES, SAMANI

Samani cultivars are widely spread throughout Lower Egypt, especially in the governorates of El-Beheira (Rasheed and Idko), Kafr El Sheikh, Alexandria, Damietta, El-Dakahlia, El-Gharbia, Giza, El-Menoufeia, El-Sharqia and Ismailia. The Samani date is  $5.50 (\pm 0.70)$  cm long and  $3.08 (\pm 0.26)$  cm in width. When the fruit fully matures and dries, its color changes from yellowish orange to mottled pale red. Samani dates are suitable for consumption and marketing during both Khelal and soft phases.



#### 12. DATES, SELMI

Selmi cultivars are cultivated at a low scale in the Ismailia and Suez governorates. The Selmi date is  $4.16 (\pm 0.59)$  cm long and  $2.54 (\pm 0.22)$  cm in width. Its color changes from pale to dark yellow or brownish-yellow in the soft phase. Selmi dates are suitable for consumption and marketing



#### 13. DATES, SEWI

Sewi cultivars are mainly found in the Siwa Oasis and Giza Governorates, especially at the Bahariya Oasis and South of Giza, as well as some areas in Fayoum governorate. The Sewi date is  $5.08 (\pm 0.38)$  cm long and  $2.80 (\pm 0.10)$  cm in width. When the fruit is fully mature, its color changes from pale yellow to pale brown in the semi-dry phase. Sewi dates are suitable for consumption and marketing during both Khelal and semi-dry phases.





#### 14. DATES, SHAMIA-BEIDA

Shamia-beida cultivars are mainly cultivated in Qena, Luxor and Aswan governorates. The Shamia-beida date is 5.46 ( $\pm$  0.63) cm long and 2.10 ( $\pm$ 0.04) cm in width. When the fruit is fully mature, its color changes from pale yellow to pale brownish yellow in the dry phase. Shamia-beida dates are suitable for consumption and marketing during the dry phase.



#### 15. DATES, SHAMIA-BONI

Shamia-boni cultivars are mainly cultivated in Qena, Luxor and Aswan governorates. The Shamia-boni date is 4.80 ( $\pm$  0.52) cm long and 2.04 ( $\pm$ 0.09) cm in width. When the fruit is fully mature, its color changes from pale yellow to brown in the dry phase. Shamia-boni dates are suitable for consumption and marketing during the dry phase.



#### 16. DATES, ZAGHLOUL

Zaghloul cultivars are widely spread in Lower Egypt, especially in the governorates of El-Beheira, Kafr El Sheikh, Damietta, El-Dakahlia and El-Gharbia, in addition to Alexandria, Giza, El-Menoufeya, El-Sharqia and Ismailia. The Zaghloul date is 5.86 ( $\pm$  0.78) cm long and 2.66 ( $\pm$ 0.18) cm in width. Zaghloul dates are consumed at the end of the Khelal phase, when the mature fruit is red. Zaghloul dates are suitable for consumption and marketing during the dry phase.



### COMMON CULTIVARS

#### 1. DATES, AGLANI

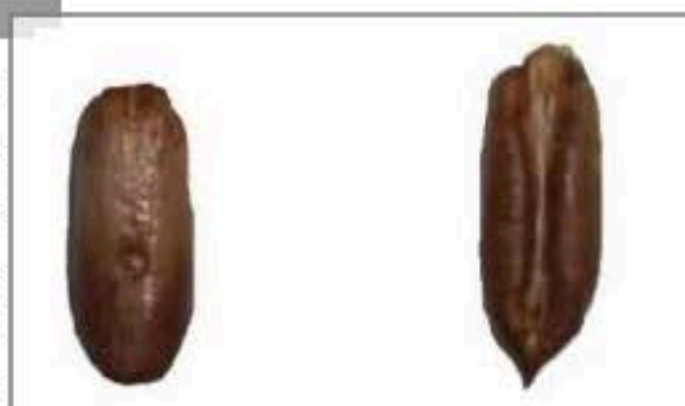
Aglani cultivars are cultivated at some areas of Sharqia Governorate. The Aglani date is 5.00 ( $\pm$  0.55) cm long and 2.36 ( $\pm$ 0. 07) cm in width. Aglani dates are suitable for consumption and marketing during the semi-dry phase, when the fruit is dark brown in color.





## 2. DATES, AGUA

Agua dates are mainly cultivated in the Aswan governorate. The Agua date is 5.24 ( $\pm$  0.60) cm long and 3.10 ( $\pm$  0.20) cm in width. Agua dates are consumed at the end of khelal phase, when the fruit is fully mature, its color changes from red to pale brownish-red during the semi-dry phase. Agua dates are suitable for consumption and marketing at the semi-dry phase.



## 3. DATES, AMRI

Amri dates are cultivated in some areas in Sharquia Governorate in Faquous, Abou Kbeer, El Salhiya and El Qureen, in addition to El-Gharbia and Qalioubeya (El Marg). The Amri date is 4.96 ( $\pm$  0.54) cm long and 2.54 ( $\pm$  0.10) cm in width. Amri dates are suitable for consumption and marketing at the semi-dry phase, when the color of the date is brownish-black.



## 4. DATES, BEID EL GAMAL

Beid El Gamal dates are cultivated in the Meet Ghamer in Daqahlia governorate. The Beid El Gamal date is 4.20 ( $\pm$  0.42) cm long and 3.16 ( $\pm$  0.21) cm in width. Beid El-Gamal dates are consumed at the end of the Khelal phase. The color of this sort of dates changes from yellow to brown when matures. Beid El Gamal dates are suitable for consumption and marketing at the soft phase.



## 5. DATES, DEGNA

Degna dates are mainly cultivated in Qena, Luxor and Aswan governorates. The Degna date is 4.70 ( $\pm$  0.50) cm long and 1.78 ( $\pm$  0.04) cm in width. Degna dates are consumed at the end of the semi-dry phase. When the fruit is fully mature, it changes from yellow to yellowish-brown during the dry phase. Degna dates are suitable for consumption and marketing during the dry phase.





#### 6. DATES, FRAHI

Frahi dates are mainly cultivated on a low scale in the Siwa Oasis. The Frahi date is 4.00 ( $\pm 0.44$ ) cm long and 2.00 ( $\pm 0.08$ ) cm in width. Frahi dates are suitable for consumption and marketing at the dry phase when the fully mature fruit's color is pale brown.



#### 7. DATES, GAAGAA

Gaagaa dates are mainly cultivated in the Bahariya Oasis in the governorate of Giza. The Gaagaa date is 4.12 ( $\pm 0.39$ ) cm long and 2.30 ( $\pm 0.08$ ) cm in width. Gaagaa dates are suitable for consumption and marketing at the dry phase when their color turn from orange to brownish-red.



#### 8. DATES, HALWYIAT

Halwyiat dates are mainly cultivated in Ismailia Governorate at Al-Kassassin area and some farms along the Cairo-Ismailia road. The Halwyiat date is 5.82 ( $\pm 0.52$ ) cm long and 2.14 ( $\pm 0.03$ ) cm in width. When the fruit is mature, its color changes from orange to pale brown during the soft phase. Halwyiat dates are suitable for consumption and marketing at both the khelal and soft phases.



#### 9. DATES, HASAWI

Hasawi dates are mainly cultivated at Aswan governorate. The Hasawi date is 4.28 ( $\pm 0.42$ ) cm long and 2.00 ( $\pm 0.06$ ) cm in width. Hasawi dates are consumed at the end of the semi-dry phase. The color of the fruit changes from yellow to brown during the dry phase when the fruit is fully mature. Hasawi dates are suitable for consumption and marketing at the dry phase.



#### 10. DATES, HEGAZI

Hegazi dates are cultivated at a low scale in the Kharga Oasis, especially in Bir El-Busstan. The Hegazi date is 5.90 ( $\pm 0.57$ ) cm long and 2.80 ( $\pm 0.08$ ) cm in width. Hegazi dates are consumed during the khelal phase. The color of the fruit changes from pale red to brown when it matures. Hegazi dates are suitable for consumption and marketing during the soft phase and may even be extended to the semi-dry phase.





### 11. DATES, KAPOUSHI

Kapoushi dates are mainly cultivated in some of the Nile Delta governorates. The Kapoushi date is  $5.80 (\pm 0.77)$  cm long and  $2.34 (\pm 0.07)$  cm in width. Kapoushi dates are consumed during the khelal phase. The color of the fruit changes from yellowish-red to brownish-red when it matures. Kapoushi dates are suitable for consumption and marketing at both the khelal and soft phases.



### 12. DATES, MOGRASH

Mogrash dates are mainly cultivated on a small scale in Aswan governorate. The Mogrash date is  $4.32 (\pm 0.43)$  cm long and  $2.12 (\pm 0.04)$  cm in width. Mogrash dates are consumed at the end of the semi-dry phase. The color of the fruit changes from orange to brownish-red during the dry phase when it matures. Mogrash dates are suitable for consumption and marketing at the dry phase.



### 13. DATES, OM EL FERA KH

Om El Ferakh dates are mainly cultivated at low scale in Rasheed and Idko of El-Beheira governorate. The Om El Ferakh date is  $5.88 (\pm 0.89)$  cm long and  $2.48 (\pm 0.18)$  cm in width. Om El Ferakh dates are consumed during the khelal phase. The color of the fruit changes from red to blackishred during the soft (Rutab) phase. Om El Ferakh dates are suitable for consumption and marketing at both the khelal and soft phases.



### 14. DATES, OREEBI

Oreebi dates are cultivated at a low scale in Rasheed and Idko of El-Beheira governorate. The Oreebi date is  $3.96 (\pm 0.36)$  cm long and  $2.84 (\pm 0.16)$  cm in width. Oreebi dates are consumed during the khelal phase, when the mature fruit is red. Oreebi dates are suitable for consumption and marketing at the soft phase.





### 15. DATES, TAMR EL WADI

Tamr El Wadi dates are mainly cultivated in low scale at El-Kharga Oasis of the New Valley governorate. The Tamr El Wadi date is 4.26 ( $\pm$  0.29) cm long and 2.14 ( $\pm$ 0. 04) cm in width. Tamr El Wadi dates are consumed at the end of the semi-dry phase. The color of the fruit changes from yellow to pale brown when it fully matures. Tamr El Wadi dates are suitable for consumption and marketing at both the dry and semi-dry phases.



### RARE CULTIVARS

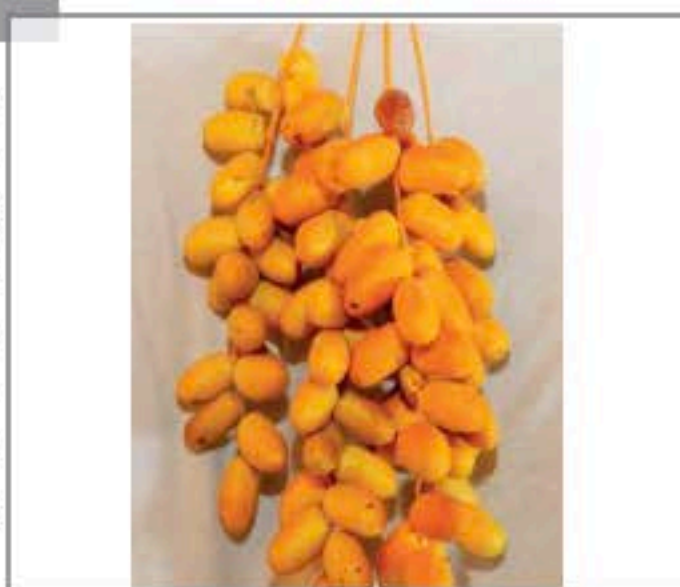
#### 1. DATES, AIENAT

Aienat dates are mainly cultivated in Qena, Luxor and Aswan governorates. The Aienat date is 5.66 ( $\pm$  0.36) cm long and 1.66 ( $\pm$ 0. 05) cm in width. Aienat dates are consumed at the end of the semi-dry phase. The color of the fruit changes from pale yellow to brownish-yellow when it fully matures. Aienat dates are suitable for consumption and marketing at the dry phase.



#### 2. DATES, CENTRAWI

Centrawi dates are mainly cultivated on a small scale in the El-Kharga Oasis, especially in Bir El-Bustan. The Centrawi date is 4.54 ( $\pm$  0.47) cm long and 2.92 ( $\pm$ 0. 17) cm in width. Centrawi dates are consumed during the soft phase. The color of the fruit changes from orange to pale brown when it fully matures. Centrawi dates are suitable for consumption and marketing at the soft phase and may be extended to the semi-dry phase.



#### 3. DATES, EL FALEK

El Falek dates are mainly cultivated on a low scale in El-Kharga Oasis, especially in Bir-El-Bustan. El Falek date is 4.50 ( $\pm$  0.37) cm long and 2.50 ( $\pm$ 0. 09) cm in width. El Falek dates are consumed during the soft phase. The color of the fruit changes from yellow to pale brown when it fully matures. El Falek dates are suitable for consumption and marketing at the soft phase and may be extended to the semi-soft phase.





#### 4. DATES, EL HOMRA

El Homra dates are mainly cultivated in Qena, Luxor and Aswan governorates. El Homra date is 4.84 ( $\pm 0.53$ ) cm long and 3.74 ( $\pm 0.33$ ) cm in width. El Homra dates are consumed at the end of the semi-dry phase. The color of the fruit changes from pale red to brownish-red during the dry phase. El Homra dates are suitable for consumption and marketing at the dry phase.



#### 5. DATES, SOFER EL DOMIN

Sofer El Domin dates are mainly cultivated on a small scale in the governorate of El-Sharqeia. Sofer El Domin date is 5.80 ( $\pm 0.70$ ) cm long and 2.64 ( $\pm 0.13$ ) cm in width. Sofer El Domin dates are consumed during the soft phase when the color of the mature fruit is pale yellow. Sofer El Domin dates are suitable for consumption and marketing at the soft phase.



#### 6. DATES, SULTANI

Sultani dates are mainly cultivated in El-Bahariya Oasis in the governorate of Giza. Sultani date is 4.88 ( $\pm 0.61$ ) cm long and 2.00 ( $\pm 0.04$ ) cm in width. Sultani dates are consumed at the end of the semi-dry phase. When the fruit fully matures, its color changes from yellow to pale brown during the dry phase. Sultani dates are suitable for consumption and marketing at the dry and semi-dry phases.



#### 7. DATES, TAKTAKT

Taktak dates are mainly cultivated on a small scale in the Siwa Oasis. Taktak date is 3.30 ( $\pm 0.26$ ) cm long and 2.12 ( $\pm 0.08$ ) cm in width. Taktak dates are suitable for consumption and marketing at both the soft and semi-dry phases when the color is pale brown.





## VERY RARE CULTIVARS

### 1. DATES, ARGHAM GHAZAL

Aienat dates are mainly cultivated in Qena, Luxor and Aswan governorates. The Aienat date is 5.66 ( $\pm$  0.36) cm long and 1.66 ( $\pm$  0.05) cm in width. Aienat dates are consumed at the end of the semi-dry phase. The color of the fruit changes from pale yellow to brownish-yellow when it fully matures. Aienat dates are suitable for consumption and marketing at the dry phase.



### 2. DATES, GHAZAL

Argham Ghazal dates are mainly cultivated on a small scale in the Siwa Oasis and they are threatened to extend being one of the very rare cultivars of dates in Egypt. Argham Ghazal date is 4.56 ( $\pm$  0.41) cm long and 2.18 ( $\pm$  0.09) cm in width. Argham Ghazal dates are suitable for consumption and marketing at the dry phase. When the date matures in the dry phase, its color changes from orange-yellow to pale brown.



### 3. DATES, SAWABEA AL-AAROSA

Sawabea Al-Aarosa dates are mainly cultivated on a small scale in the Siwa Oasis and belong to the category of the very rare cultivars of dates in Egypt. Sawabea Al-Aarosa date is 4.80 ( $\pm$  0.51) cm long and 2.24 ( $\pm$  0.05) cm in width. Sawabea Al-Aarosa dates are suitable for consumption and marketing at the khalal and soft phase where fruits change from orange to pale brown at maturity.



### 4. DATES, WARDI

Wardi dates are mainly cultivated on a small scale in Aswan governorate. Wardi date is 4.50 ( $\pm$  0.46) cm long and 2.14 ( $\pm$  0.04) cm in width. The consumption of Wardi is at the end of semi-dry phase, in which fruits are pale red and change to brown at full maturity in the dry phase. Wardi dates are suitable for consumption and marketing at semi-dry and dry phases.





## ENDEMIC CULTIVARS

### 1. DATES, ABOU TEDA

Abou Teda dates are mainly cultivated on a small scale in Siwa Oasis. Abou Teda date is 4.20 ( $\pm 0.40$ ) cm long and 2.42 ( $\pm 0.09$ ) cm in width. The consumption of Abou Teda is at the end of khalal phase, in which the date turns from orange to brown at full maturity. Abou Teda dates are suitable for consumption and marketing at the soft phase.



### 2- DATES, AFRAH

Afrah dates are mainly cultivated on a small scale in Siwa Oasis. Afrah date is 4.86 ( $\pm 0.453$ ) cm long and 2.42 ( $\pm 0.08$ ) cm in width. The consumption of Afrah is at the end of khalal phase, in which the date turns from brownish yellow to pale brown. Afrah dates are suitable for consumption and marketing at the soft phase.



### 3- DATES, AGHREEB

Aghreeb dates are mainly cultivated on a small scale in Siwa Oasis. Aghreeb date is 3.36 ( $\pm 0.25$ ) cm long and 2.00 ( $\pm 0.03$ ) cm in width. Aghreeb dates are suitable for consumption and marketing at the soft phase when the fruit is fully mature and its color changes from orange to brown.



### 4- DATES, AGZEEN

Agzeen dates are mainly cultivated on a small scale in Siwa Oasis. Agzeen date is 4.68 ( $\pm 0.50$ ) cm long and 2.22 ( $\pm 0.05$ ) cm in width. Agzeen dates are mostly consumed at the khelal phase, however, they are suitable for consumption and marketing at the khelal and semi-dry phases. When the fruit is fully mature, its color changes from yellow to pale brown during the semi-dry phase.



### 5- DATES, AJBEER

Ajbeer dates are mainly cultivated on a small scale in Siwa Oasis. Ajbeer date is 4.02 ( $\pm 0.37$ ) cm long and 2.50 ( $\pm 0.10$ ) cm in width. Ajbeer dates are suitable for consumption and marketing at the semi-dry phase, when the fruit is dark brown yellow in color.





#### 6. DATES, AKOUSH

Akoush dates are mainly cultivated on a small scale in Siwa Oasis. Akoush date is 3.88 ( $\pm$  0.34) cm long and 2.54 ( $\pm$ 0. 10) cm in width. Akoush dates are at the end of khelal phase. Its color turns from yellow to pale brownish-black when it fully matures, and its moisture content is high.



#### 7. DATES, AMENZOH

Amenzoh dates are mainly cultivated on a small scale in Siwa Oasis. Amenzoh date is 4.00 ( $\pm$  0.37) cm long and 2.34 ( $\pm$ 0. 09) cm in width. Amenzoh dates are at the end of khelal phase. Its color turns from yellow to brownish-black when it fully matures, and its moisture content is high.



#### 8. DATES, AMLAL

Amlal dates are mainly cultivated on a small scale in Siwa Oasis. Amlal date is 2.92 ( $\pm$  0.17) cm long and 0.96 ( $\pm$ 0. 19) cm in width. Amlal dates are suitable for consumption and marketing during the soft phase. Its color turns from yellow to brown when it fully matures.



#### 9. DATES, AZWAGH

Azwagh dates are mainly cultivated on a small scale in Siwa Oasis. Azwagh date is 3.50 ( $\pm$  0.25) cm long and 2.20 ( $\pm$ 0. 06) cm in width. Azwagh dates are suitable for consumption and marketing during the soft phase. Its color turns from pale red to brownish black when it fully matures, and its moisture content is high.



#### 10. DATES, BADI

Badi dates are mainly cultivated on a small scale in Siwa Oasis. Badi date is 3.50 ( $\pm$  0.28) cm long and 2.52 ( $\pm$ 0. 10) cm in width. Badi dates are suitable for consumption and marketing during the soft phase. Its color turns from orange to brown.





### 11. DATES, BAHI

Bahi dates are mainly cultivated on a small scale in Siwa Oasis. Bahi date is 5.04 ( $\pm$  0.56) cm long and 2.24 ( $\pm$  0.05) cm in width. Bahi dates are consumed at the end of the khelal phase. They are suitable for consumption and marketing during both the khelal and the semi-dry phase. Its color turns from yellowish orange to pale brown when it fully matures during the semi-dry phase.



### 12. DATES, EGHAM ELSAID

Eghram Elsaïd dates are mainly cultivated on a small scale in Siwa Oasis. Eghram Elsaïd date is 3.54 ( $\pm$  0.28) cm long and 2.42 ( $\pm$  0.08) cm in width. Eghram Elsaïd dates are suitable for consumption and marketing during the soft phase. When the fruit fully matures, its color turns from orange to brown.



### 13. DATES, EGHRAWN NEHLOTEN

Eghrawn Nehloten dates are mainly cultivated on a small scale in Siwa Oasis. Eghrawn Nehloten date is 4.10 ( $\pm$  0.39) cm long and 2.60 ( $\pm$  0.12) cm in width. Eghrawn Nehloten dates are suitable for consumption and marketing during both the soft and semi-dry phases. Its color turns from orange to brownish-red when it fully matures.



### 14. DATES, EL-MADENH

El-Madenh dates are mainly cultivated on a small scale in Siwa Oasis. El-Madenh date is 4.66 ( $\pm$  0.49) cm long and 1.96 ( $\pm$  0.02) cm in width. El-Madenh dates are suitable for consumption at the end of both the khelal and semi-dry phases. The color of the fruit turns from pale yellow to pale brown when it fully matures.



### 15. DATES, EZAWI

Ezawi dates are mainly cultivated on a small scale in Siwa Oasis. Ezawi date is 3.70 ( $\pm$  0.28) cm long and 2.46 ( $\pm$  0.04) cm in width. Ezawi dates are consumed during the khelal phase, and they are suitable for consumption and marketing during the khelal and semi-dry phase. Its color turns from orange to pale brown during the semi-dry phase.





#### 16. DATES, GHAZOULI

Ghazouli dates are mainly cultivated on a small scale in Siwa Oasis. Ghazouli date is 4.00 ( $\pm$  0.37) cm long and 1.92 ( $\pm$ 0. 04) cm in width. Ghazouli dates are consumed at the end of khelal phase and are suitable for consumption and marketing during the khelal and semi-dry phases. Its color turns from yellow to brown when it fully matures.



#### 17. DATES, HOLOW GHANEM

Hollow Ghanem dates are mainly cultivated on a small scale in Siwa Oasis. Hollow Ghanem date is 4.30 ( $\pm$  0.42) cm long and 2.14 ( $\pm$ 0. 03) cm in width. These dates are consumed in the khelal phase. Hollow Ghanem change their color from orange to brown during the semi-dry phase when they fully mature. Dates are suitable for consumption and marketing during the khelal phase and semi-dry phase.



#### 18. DATES, HYDRA

Hydra dates are mainly cultivated on a small scale in Siwa Oasis. Hydra date is 3.50 ( $\pm$  0.25) cm long and 2.20 ( $\pm$ 0. 06) cm in width. Hydra dates are suitable for consumption and marketing during both the semi-dry and dry phases. Its color turns from red to brownish red when it fully matures.



#### 19. DATES, KEABI

Keabi dates are mainly cultivated on a small scale in Siwa Oasis. Keabi date is 3.70 ( $\pm$  0.28) cm long and 2.18 ( $\pm$ 0. 05) cm in width. Keabi dates are suitable for consumption and marketing during both the soft and semi-dry phases. Its color turns from yellow to brown when it fully matures.



#### 20- DATES, LAKRAMAT

Lakramat dates are mainly cultivated on a small scale in Siwa Oasis. Lakramat date is 4.32 ( $\pm$  0.25) cm long and 2.50 ( $\pm$ 0. 09) cm in width. This fruit is consumed at the end of the khelal phase. Its color turns from orange to brownish-black during the semi-dry phase. Lakramat dates are suitable for consumption and marketing during both the khelal and semi-dry phases.





### 21. DATES, LEKWRAM

Lekwram dates are mainly cultivated on a small scale in Siwa Oasis. Lekwram date is 4.60 ( $\pm$  0.48) cm long and 2.80 ( $\pm$ 0. 17) cm in width. This fruit is consumed in the khelal phase and its color changes from pale yellow to pale brown during the semi-dry phase. Lekwram dates are suitable for consumption and marketing during both the khelal and semi-dry phase. Its color turns from pale red to brownish black when it fully matures, and its moisture content is high.



### 22. DATES, NAWAR

Nawar dates are mainly cultivated on a small scale in Siwa Oasis. Nawar date is 4.54 ( $\pm$  0.43) cm long and 2.08 ( $\pm$ 0. 04) cm in width. Nawar dates are suitable for consumption and marketing during both the khelal and semi-dry phases. Its color turns from orange to pale brown during the semi-dry phase.



### 23. DATES, OLKIK WNGEM

Olkik Wngem dates are mainly cultivated on a small scale in Siwa Oasis. Olkik Wngem date is 3.81 ( $\pm$  0.28) cm long and 2.12 ( $\pm$ 0. 05) cm in width. Olkik Wngem dates are suitable for consumption and marketing during the dry phase. Its color turns from dark red to brownish red when it fully matures



### 24. DATES, OSHEK ENGEBEL

Oshek Engebel dates are mainly cultivated on a small scale in Siwa Oasis. Oshek Engebel date is 4.58 ( $\pm$  0.42) cm long and 2.42 ( $\pm$ 0. 10) cm in width. Oshek Engebel dates are suitable for consumption and marketing during the soft phase when its color is pale brown.



### 25- DATES, SEBHA

Sebha dates are mainly cultivated on a small scale in Siwa Oasis. Sebha date is 2.84 ( $\pm$  0.15) cm long and 1.84 ( $\pm$ 0. 04) cm in width. This breed is consumed at the end of the khelal phase. it color changes from pale yellow to brown during the semi-dry phase.





Sebha dates are suitable for consumption and marketing at both the khelal and semi-dry phases. What makes this breed unique is that they are suitable for animal fodder and date processing industries.

#### 26. DATES, SHALI

Shali dates are mainly cultivated on a small scale in Siwa Oasis. Shali date is 4.58 ( $\pm$  0.47) cm long and 2.20 cm in width. Shali dates are suitable for consumption and marketing during the soft phase. they are consumed at the end of the khelal phase, and their color turns from yellow to brown when they fully mature.



#### 27. DATES, TAZARAKHT

Tazarakht dates are mainly cultivated on a small scale in Siwa Oasis. Tazarakht date is 3.92 ( $\pm$  0.35) cm long and 2.26 ( $\pm$  0.05) cm in width. Tazarakht dates are suitable for consumption and marketing at both the semi-dry and dry phases when they fully mature and turn from yellow to brown.



#### AGWA

Agwa is a sticky, chewy, date paste that has been produced across Egypt for hundreds of years. Giza, Siwa and North Sinai are particularly noteworthy centers of production in Egypt. Agwa is made of dried semi-soft dates. After harvest, dates are sun-dried then they kneaded and compressed in molds. In addition to being sweet, it retains the strong mineral flavor of dates. What makes Agwa unique is that it is healthy, stored easily and can easily be promoted. The production of Agwa is mostly conducted on a small-scale manufactories and home based. There are very few events held to promote for Agwa, and the production knowledge related to the product is transmitted from one generation to another.

#### DATE MOLASSES

Date Molasses is a type of processed sweetener that has been produced in Siwa for hundreds of years. This product is a thick syrup that comes from crushing dates. First, manufacturers crush the dates to extract the juice, then, they boil down the juice to form a rich, dark syrup. The uniqueness of the date molasses in Siwa is the richness of the oasis with a variety of date cultivars that do not exist elsewhere in Egypt.





### **GOMMAR/AGROSE**

Gommar has been produced in Siwa for more than 60 years. The product is known in Siwa as Agrose rather than Gommar. This drink has a sugary taste; It is extracted from the heart of the palm trees. The known-how to produce it is transmitted through generations. Because it requires physical strength, the production of Agrose mainly depends on men. Also, people in Siwa emphasize on the cultural features of Agrose because they consume it in certain cultural events; such as Al-Shamata (which means missing in English) when the family of the bride go visit her on the 7th day after her wedding and give her the Agrose, and people in Siwa also drink it on the 2nd day of Eid Al-Adha (festival of sacrifice).



### **OLIVES**

#### **OLIVE, HAMED**

Hammad olives have been cultivated in Siwa for at least 500 years. They are medium-sized olives, rectangular-shaped and puff from the bottom. The olive weighs between 5-8 grams, the oil ratio of the olive is 16-19%. The seed is rough. The Hammad olives are mostly pickled and not consumed fresh. Hammad olives are unique because they are considered the finest among native table olives, and because they are a medium- to large-sized fruit with a high flesh-to-stone ratio.



#### **OLIVE<sup>14</sup>, MARAQI**

Maraqhi olives have been cultivated in Siwa for at least 500 years. So far Maraqi accounts for only 2% of the olive crop area, but it is being propagated on a commercial scale and is expected to become Egypt's main oil cultivar. It ripens from November to December. The small-fruited variety excels with its high productivity and elevated oil content of up to 25%; which makes it unique. The olive weighs between 3 to 6 grams.

#### **OLIVE, WETEIGEN**

Weteigen olives have been cultivated in Siwa for at least 500 years. The fruit is smaller than the Hammad olives and has a medium flesh-to-stone ratio. Although the fruit can be consumed fresh, it is mainly used for the extraction of oil that is high in oleic acid and has low bitterness. Its rooting ability and productivity are intermediate. Weteigen ripens from September to November. The average weights between 4-6 grams, oil ratio is 18-20%.

<sup>14</sup><https://arshad2010.yoo7.com/t179-topic>



### GREEN OLIVES/TOFAHY

Green olives have been produced in Fayoum for at least 500 years. they are solid, green and taste savory. The production of green olives in Fayoum is conducted on a small scale, and its knowledge is transmitted from one generation to another.

### FIGS (COMMON)

Common Figs have been cultivated in Egypt for more than 500 years. There are 4 different varieties: Sultani cultivated in Marsa Matrouh, Aswani cultivated in Aswan, Aboudi in Qena and Adasi in Sinai.

The sultani fig has been cultivated in Marsa Matrouh for at least 500 years. the sultani variety solid; is dark blue that tends to black; It's very sweet, and it smells fruity. This breed is irrigated with rainwater. Sultani Figs are usually cultivated in small-scale family gardens, and its cultivation knowledge is transmitted from one generation to another. The fig cultivated in Marsa Matrouh is especially unique because it is one of the finest types of figs in Egypt in terms of quality and is very high rich in sugar; this is due to its dependence on rainwater for irrigation. Additionally, it's one of the most important crops that Matrouh residents depend on as a source of income. As it has a very high quality and rich in sugar.



### SUGAR CANE

#### 1. SUGAR CANE, FRESH

Sugarcane cultivation in Minya began in the middle of the 18th century. The plant belongs to the tall grass family; It is two to six meters tall. It has stout, jointed, fibrous stalks 3 to 4 meters in height and 5 cm in diameter. Sugarcane is the main source of sugar in Egypt. The plant is cultivated on a large scale in Minya; or used to be before the terrorist attempts in the 1990s that took place in the sugarcane fields, and its cultivation knowledge is transmitted from one generation to another.



#### 2- SUGAR CANE MOLASSES

Molasses is a thick syrup produced from sugar cane in Minya since at least the 19<sup>th</sup> century. First, manufacturers crush the sugarcane to extract the juice, then, they boil down the juice to form sugar crystals. The molasses is the brown syrup that is left after the sugar crystals are removed from the juice<sup>15</sup>. Manufacturers repeat this process several times, and each time, a different grade of molasses is produced.





## DOUM PALM

Doum palms have been cultivated in Aswan for millenia. The Doum fruit is the size of an apple, a red-orange color and tastes like gingerbread. It is about seven or eight centimeters long and similarly broad, irregular and bumpy in shape, and its pericarp is glossy brown in color. Egypt is considered as the original home of Doum, which makes it especially unique. Doum is very popular in Egypt, especially during the fasting month of Ramadan, and its knowledge is transmitted from one generation to another.



## MANGOS

Mangos has been introduced to Egypt crops varieties in 1825 during Mohammad Ali Regime. It is an exotic fruit that has developed over the years to have unique landrace specificity and characteristics. Mangos are commonly consumed and favored by locals around all Egypt. It is cultivation is prominent in 3 governorates: Ismailia, Sharqiyah and Fayoum. It is a summer fruit and is consumed in massive amounts locally and some of the production is exported. There are different varieties of mangos, where they vary in fruit size ground color, pulp color, seed size, pulp weight, sugar, ash and fiber contents as well as flavor.

### 1. MANGOES, ALFONS

This mango cultivar is a seasonal fruit, available mid-June through the end of August. The fruits generally weigh between 150 and 300 grams (5.3 and 10.6 oz). They have a rich, creamy, tender texture and delicate, non-fibrous, juicy pulp. The production of Alfons mangoes is conducted through medium—sized producers (3<sup>rd</sup> highest production of mangoes in Egypt).



### 2. MANGOES, FAS ELEWIS

This cultivar is the smallest in size and sweeter a yellow in color compared to the other mango cultivars, which also makes it the highest in price. The production of this type of mangoes is conducted by the medium sized producers.



### 3. MANGOES, HINDI

Hindi mangoes are also cultivated in the 3 governorates; this cultivar is light green colored, and its seed is slimmer compared to other cultivars. and is sweeter compared to the other cultivars. The production of this type of mangoes is conducted by the medium to large sized producers.

<sup>15</sup> <https://www.medicalnewstoday.com/articles/318719#nutrition>



#### 4. MANGOES, HINDI SENARA

Hindi senara mangoes have been cultivated in **Fayoum, Ismailia and Sharqeya** for more than 60 years. The production of this type of mangoes is conducted by the medium to large sized producers.



#### 5. MANGOES, QALB ELTOUR

Qalb Eltour in English means the heart of the bull; which is mainly due to the shape of the fruit. The mango is in the shape of a compressed heart. The size of the latter is relatively larger than the other mango cultivars. The seed is medium sized, thick, and sticky to the pulp. The skin is smooth and soft. The aroma of these mangoes is very light and fruity. The pulp is yellow with a buttery texture. They are free of fibers. The production of this type of mangoes is conducted by the medium to large sized producers.



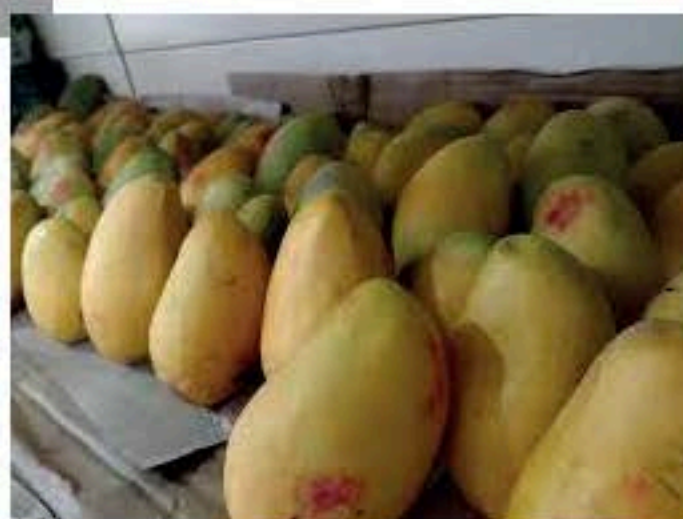
#### 6. MANGOES, TAYMOUR

Taymour mangoes has been cultivated in Ismailia for more than 60 years. The fruit is oval, medium sized, dark green-blue colored. The skin is smooth and soft, the aroma is fruity. The pulp of the fruit is light orange/yellowish, it has a buttery texture and is very delicious. The seed is rather small. They are free of fibers. The production of this type of mangoes is conducted by the medium to large sized producers.



#### 7. MANGOES, EWIS

Ewis mangoes have been cultivated in Fayoum, Ismailia and Sharqeya for more than 60 years. They are solid; their color is orange from the inside and yellowish from the outside; they taste sweet and sugary and smell fruity; the fruit is small sized with an average weight that goes up to 250 grams per fruit. They are free of fibers. The seed is rather small and constitutes around 75% of the weight of the fruit. The production of this type of mangoes is conducted by the medium to large sized producers.





## 8. MANGO, PERU

Mangos peru are only cultivated in Fayoum governorates. This breed is not common locally and is directly exported according to its producers. The stand-out characteristics of this mango breed is the tangy taste and a smooth non-hairy pulp/flesh.

## CITRUS

Egypt is one of the most famous countries in citrus production around the world where its products are globally demanded in both Europe and Asia. During the last three years, Egypt has pioneered the citrus exports to the globe. Egypt produce 3 types of citrus with various varieties: Oranges, Tangerine and Lime. Citrus cultivation is characterized by a deep know-how that is inherited across generation as it entails the art of grafting.

### 1. ORANGES

Orange cultivation has been introduced to Egypt's agriculture landscape after the Arab conquest during the 640s A.D. There are different varieties of oranges, some exists since its introduction such as Baladi, Shamourty and red while others have been imported in 1927 by the horticulture institute under the ministry of agriculture from United States and developed into local landrace such as Valencia oranges and Navel Oranges (Hagras, 1996). One of the unique aspects about orange cultivation and varieties in Egypt is that they are all grafted over sour/bitter orange. The below table shows the different varieties and their location across Egypt.



VARIETY	GOVERNORATES
Baladi Oranges	Ismailia, Giza, Assuit and Beheira
Red Oranges	Beheira, Assiut, Sharqeya and Beni Suef
Shamourty Oranges	Assiut, Giza, Kafr El-Sheikh, Qalyubia, Sharqeya and Beni suef
Navel Oranges	Gharbiya, Menoufia, Qalyubia, Sharqeya and Beheira
Valencia Oranges	Sharqeya, Ismailia and Beheira

In addition to its consumption as fresh fruit, oranges are used

### 2- SOUR/BITTER ORANGES

Commonly known as lareng; they represent the main fruit tree upon which most oranges varieties are grafted. Due to their bitterness, they are traditionally consumed as Jam. Lareng jams are usually home made.



### 3. BANZAHEER LIMES

Limes are commonly referred to as Lemons or balady lemons in Egypt. Banzaheer lime are scientifically known by *Citrus aurantifolia* and commonly named Key lime around the globe. It is believed that lime has been introduced to Egypt through India (Assuity, 1968) and the earliest remains discovered date back to the 11<sup>th</sup> -13<sup>th</sup> Century A.D. Banzaheer lime are very small and sour and green in color. It is worth mentioning that in addition to Banzaheer which is known in the market by “EgyptianLemon”, Egypt also cultivate Adalia lemon that was also introduced by



the horticulture department in 1939 from Italy (Hagras). However, Adalia lemon are not considered a local taste or consumed as an element of the Egyptian Diet.

Baladi lemons are used as acidic additives to different foods in the Egypt cuisine, in addition it is consumed as fresh juice and pickled with fenugreek and safflower. The pickled lemons are both home-made and industrial made.

### 4. TANGERINE, YOUSFI SULAIMAN

Tangerine has been introduced to the agriculture scene in Egypt during the modern Egypt era (early 1800s). It is named after the noble person who introduced it Yousef Soliman. It is locally distinguished by the name “youssefi Baladi”. It is cultivated in different areas in Egypt, nonetheless the most famous is Assuit.

### GRAPES

Grapes are considered an ancient fruit for Egyptians; it is also considered as the first exotic/foreigner fruit to be introduced in Egypt. It used to be consumed as fresh fruit and processed as wine during the pharaonic era. Grapes are believed to have been introduced to Egypt from Levant area through trade with Canaan. The consumption of grapes varied across history with different crossing civilizations. As grapes were associated with wine and alcohol consumption, its cultivation went to minimum level post the Arab/Islamic conquest to Egypt, which results in different local land-race cultivars becoming extinct.



In 1930s, the horticulture institute imported 240 different varieties of grapes to reinstate grapes cultivation in Egypt. Two main varieties: Red Roumi and Green Banati were the one elected by researchers as the best variety for the Egyptian soil and weather. Given grapes appeal to the Egyptian taste, an expansion in its cultivation occurred and imports stopped after Egypt reached 8000 tons of Imports before the 1930.



There are 6 different varieties of grapes in Egypt: Red rousi with seeds, cultivated in Assuit and Minya ; Seedless green banati cultivated in Alexandria and Delta, in addition to 4 local land race varieties that survived: Grapes sidi barani in Matrouh, Grapes Khalili in North Sinai, Baladi grapes in Menoufia and Giza and Fayoumy grapes in Fayoum. It is worth noting that these 4 local races are not cultivated in a commercialized scale as the rousi and banati.



*Banati Grapes*



*Rousi Grapes*



*Khalili Grapes of North Sinai*

## VEGETABLES, LEGUMES AND TUBERS

### *HOMOS EL-HALAWA*

Homos El-Halawa, a chickpea cultivar, has been cultivated in Delta for hundreds of years. The Homos is solid, its color is beige, and it is small sized. It is cultivated in Delta. The processed version of this product is culturally related to the moulid festival in Egypt (Al-Mouled Al-Nabawy is the Birth of Prophet Mohammed, also called Moulid El Nabi, which falls on the 12<sup>th</sup> day of the third month of the Islamic calendar, Rabi'i Al-Awal). The knowledge to producing it is basic, and it is transmitted between generations. It is sold in local markets, festivals, shops and mini-markets. The production of homos El-Halawa is mainly conducted on a small scale of small enterprises and factories.



### *GREEN CHICKPEAS; MALANA*

Green chickpeas have been cultivated in Delta for at least 500 years. These chickpeas are harvested early, which give them their green color. They are also cultivated in Upper Egypt, however their cultivation and harvest season in Delta is associated with their consumption in Sham ElNessim, an ancient Egyptians Spring festival to celebrate harvest season, as it is





mainly consumed around this period of the year. The Upper Egypt's one is not ready for consumption by that time of the year.

#### **MOLOKHEYA SIWA**

Molokheya has been cultivated in Siwa for hundreds of years. It is consumed on an almost daily basis in the form of a green soup that can either be eaten with rice or bread. It is made from leaves of *Corchorus olitorius*, commonly known as Nalta Jute, tossa jute, and Jew's mallow. This type of Molokheya in Siwa is different from the other molokheya planted in the Nile Valley; its leaves are light green and not as dark as the other cultivar of molokheya, and its leaf size is 3-4 times the size of the latter. It is cultivated on a small scale, mainly in home gardens. Then after harvest they place it on a piece of cloth on the house roof to dry under the sun. The dried leaves are crushed, sometimes into a powder. They mainly eat it dried throughout the year. The processing knowledge of molokheya in Siwa is transmitted through generations. This product is sold in local markets, urban bazaars and markets.



#### **TERFAS, DESERT TRUFFLES**

Terfas has been cultivated in North Sinai, Marsa Matrouh and Beheira for at least 500 years. Terfeziaceae is a family of truffles that lives in ectomycorrhizal association with a number of plant species. It has been consumed since ancient times in Egypt as it has in many desert cultures. They form underground and are harvested by experienced collectors who can detect them by reading the landscape.

They are brown potato-shaped and while once common in the markets of Cairo, today they are not really known outside of Bedouin communities in the northwestern and northeastern deserts. They can be eaten as a vegetable, in stews or with other foods such as eggs. (see Kagan-Zur et al (eds) 2014. Desert Truffles: Phylogeny, Physiology, Distribution and Domestication).





### TIGER NUT

Tiger nuts has been cultivated in Beheira, Gharbiya and Kafr El-Sheikh for at least 500 years. It is a prehistoric Egyptian food from the papyrus family. It has been found in the intestines of mummies from prehistoric times through the Coptic age. It is consumed fresh, dried and rehydrated, and as a drink. It is a common snack item, particularly in the Delta region. It grows naturally on the banks of the Nile and canals and is cultivated by sowing the tuber. This product is wild, it has a sweet, nutty flavor, comparable to coconut with a brown color. It is soaked and eaten during the celebration of moulids (The birthday of the prophet Muhammad).



### FAVA BEANS; EGYPTIAN BEANS

Fava beans have been cultivated in Delta and Upper Egypt for millenia. They are solid, they can either be Green or Brown, they have a mild creamy flavor and an herbal smell. Traditionally fava beans were also processed in a specific way, called Tadmees that requires that the fava beans to be soaked and cooked for long hours at a low heat, to ensure that the hard bean gets soft enough to be eaten. Fava beans are sold in the local markets, urban bazaars and markets, shops & minimarkets. They are produced both



### BALADI GARLIC

Baladi garlic has been cultivated since ancient Egypt history. The local variety has been developed by the agriculture research center and the seeds that originate from it are called "seds 41 and seds42". The majority of garlic is cultivated in Beni suef and a small portion of the production occurs in Minya; however



the processing in terms of preparation and drying occurs in Minya with a collective dimension of know how that is mastered by women while businesses are owned by men in processing units that are dominated by informal ones with minor existence of formal ones. Baladi variety is unique and distinct from other foreign breeds due to its stronger smell and inner juice, however the shape of the baladi garlic product does not look as uniform as them. Moreover, the baladi variety has a purpleish skin not white. Baladi variety is traded in the local market as fresh garlic, yet exported as green garlic where it is harvested at an earlier stage, dried and packaged.



### **FLAXSEED OIL**

Flaxseed is cultivated in Daqahlia and Kafr El-Sheikh, from which flaxseed oil has been extracted for at least 500 years; ancient Egyptians used to cultivate flax plants for its quality in textiles and apparel in addition to its quality in nutrition.<sup>16</sup> This oil tastes a little nutty and some might say that it has a somewhat fishy aroma. It is affiliated with favabeans, the daily breakfast of locals.



### **CHILI PEPPER/ FEFEL HAREF**

Chili pepper has been cultivated in Delta and Upper Egypt for at least 500 years. They are used in many cuisines as a spice to add heat to the different dishes.



### **SPRING ONION/ GREEN ONION**

Spring onions have been cultivated in Egypt since pharaonic times. Spring onions are a variety of the scallion or green onions, i.e. the edible part of the *Allium* species, having a stronger flavor, with a strong distinctive bite; It is solid with a white-golden color and a funky smell.

Although Egyptians eat it anytime of the year, they are known to be eaten especially in Sham El Nessim with Fesikh and salted fish.



### **EGYPTIAN LUPINS**

Lupins are solid, yellow and salty seeds that belong to the tuber's category of products. It has been cultivated in Upper Egypt for at least 500 years. This product is mostly eaten as pickled snack food during Eid and Sham El Nessim.



<sup>16</sup> <https://www.webmd.com/vitamins/ai/ingredientmono-990/flaxseed-oil>



## HERBS AND SPICES

### *ANISE (PIMPINELLA ANISUM L.)*

Likely indigenous to Egypt, Anisa has a long history of documented use. Today it is primarily consumed as a hot beverage. And, like many herbs and spices in Egypt, is increasingly grown for export. This inventory identifies Minya as having the most distinct flavor.

### *CUMIN (CUMINUM CYMINUM L.)*

Cumin is an essential aspect of Egyptian cuisine's flavor profile. It goes into a wide range of foods from breakfast ful to vegetable and meat stews. Cumin has been used extensively since Pharaonic times for food and medicinally. The most notable production comes from Minya and Assiut in Upper Egypt and Gharbiya in the Delta .

### *CORIANDER (CORIANDRUM SATIVUM)*

Coriander is an essential aspect of Egyptian cuisine's flavor profile. It goes into a wide variety of foods in various forms. The leaves are consumed fresh, for example in salads, and added to various foods (such as ta` meya and stuffed vegetables). Dried leaves are used as a spice in cooking. The dried seeds, both whole and ground, are an essential spice in everything from ta` meya to molokhiya. It is also part of the tripartite "greens", often bundled together with parsley and dill. It has existed in Egypt since ancient times and was cited by Pliny as being the best (Manniche 1989, 94). It is grown across the country but it is likely that the long hot days in Upper Egypt confer stronger aromas .

### *DOKKA*

Dokka is a spice mix. While it has general features, the exact composition varies accross Egypt and there are often family recipes. It contains some or all of: cumin, coriander seed, sesame seed, nigella seed, black and/or white pepper, sumac and noql (a generic term for seeds, which often refers to apricot seed). It is most notable in Upper Egypt .

### *FENNEL (FOENICULUM VULGARE MILL.)*

Fennel has been used since at least Coptic times, though the ancient Egyptians likely knew it too. It is used for flavoring (particularly with baked goods) and as a digestive in teas. The most notable area of production is Assiut.

### *FENUGREEK (TRIGONELLA FOENUM-GRACEUM L.)*

Fenugreek has been used since pharaonic times. It has a distinctive flavor and an overbearing heady aroma. It is a common pantry spice. It is a defining characteristic of the corn-based bettaw crackers and of the cured meat, basterma. The sprouted seeds are also eaten raw. It is associated with pre and post-natal health and is thought to assist in weight gain. It is grown in Upper Egypt.

### *LEMONGRASS (CYMBOPOGON PROXIMUS)*

Lemongrass, or Half-bar, is a member of the lemongrass genus. It is grown primarily in Aswan and is used for a variety of medicinal purposes. It is consumed mainly as a hot infusion .



#### **HIBISCUS (HIBISCUS SABDARIFFA L. VAR SABDARIFFA; H. SABDARIFFA VAR ALTISSIMA )**

Karkade is an important beverage. It is consumed as an infusion, both hot or cold. The most notable areas of production are Aswan and Qena in Upper Egypt .

#### **NIGELLA SEED (NIGELLA SATIVA L)**

Nigella seeds are used for food and medicinal purposes. They are included in spice mixes, added to bread for flavoring. While they have been found in ancient Egyptian tombs, it is not clear what they were used for. It was already in use medicinally by Coptic times. The most notable sources in Egypt are the Upper Egyptian provinces of Minya, Assiut and Qena .

#### **SIWA SALT**

Because Siwa sits in a depression in the dessert on very saline land, irrigation and well water, dissolve the salts in the earth and wash into the saline lakes of Siwa. The hot arid weather makes it relatively easy to extract salt from these lakes. The Salt is an essential element of Siwan culture and cuisine. The salt-mud, karsheef, is traditionally the main construction material. The salt is essential to preserving olives, one of Siwa's two main crops. It is used to salt meats for preservation, although this practice is disappearing thanks to long-supply chains and refrigeration .

#### **SPEARMINT (MENTHA SPICATA)**

Spearmint is commonly used and found across Egypt, mainly as an addition to tea or as it's own infused hot drink. The landraces in Siwa are particularly noteworthy.



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## ANNEX



## ANNEX 1: PRODUCT SHEET

<b>Name of Product</b>		
<b>Variation of product names</b>		
<b>Territory/Region of production/processing</b>		
<b>Unique food to Region</b>		
	Dairy	
	Meat, Poultry and other animal products	
	Vegetables, Legumes, Tubers	
	Grains & Breads	
	Fish & Seafood	
	Fruits	
	Spices	
	Other	
<b>Product description, characteristics, specificities</b>		
	Wild, Agricultural Crop or processed product?	
	What is unique about its color, odor, taste nutrition?	
	What equipment used?	
<b>Link to defined territory</b>		
	Is the product typical to a certain region or many?	
	Where does the product originate from?	
	Where is the product currently produced?	
<b>Production process, processing, preservation specificity</b>		
	Where does production/processing happen? e.g. season, moon phases, calendars	
	Identify variants of the product - such as artisanal or industrial + ingredients used + dimension and shape	
	Where and for how long can it be stored?	
<b>Are sanitary norms followed?</b>		
	Yes or No? and by Whom? e.g. artisanal vs industrial	
<b>Links to local ingredients/resources?</b>		
	Processed: are the ingredient from the region of origin?	
	Agricultural crops: what is the local breed/variety, and specificities of the territory	



<b>Links to local knowledge</b>		
	What know-how and specific knowledge to produce/process?	
<b>Historical aspects/depth</b>		
	How long has this product existed? Do you know historical references?	
<b>Producer description</b>		
	What kind of producers- home based/ small scale/ enterprise/ factory?	
	How many producers? What is role of women & youth?	
	Producers compete or have a collective activity? (cooperative, market, purchasing?)	
<b>Existence of labels or product standards?</b>		
	Does the product have a label- based on standards? e.g. GAP, Organic, HCCP, IP etc.	
<b>Links to local gastronomy?</b>		
	What traditional foods or recipes contain this product?	
<b>Links to local culture</b>		
	What events, festivals etc. linked to product?	
<b>Sale of product</b>		
	Is this product produced for home consumption or is it sold?	
	Is it in bulk, packaged or labeled?	
	How is it sold and what markets does it reach (local, Cairo, city, international)	
<b>Sources used</b>		
<b>Producer contacts information</b>		

Table 2 : Product Sheet



## ANNEX 2: KEY INFORMANTS INTERVIEWS GUIDELINE

### *INTRODUCTION*

Enroot consultancy is currently working with UNIDO on conducting a mapping study on the Egyptian traditional food products in order to identify potential terroir products that are historically, culturally and physically linked to its region. The UNIDO has worked on similar project in the region particularly in Tunisia and Morocco known as PAMPAT, where they developed the value chain of three terroir products in each of them.

The study in Egypt is focused mainly on raw and processed food products such as Siwan palm dates and Kishk. The objective of the study is to have a sort of data base for traditional food as such thing does not exist and to also identify potential technical assistance needed in case UNIDO decided to develop any of them later as was done in Tunisa for example.

### *QUESTIONS*

- 1 . What are the traditional cultural crops in Egypt and where they are located?
- 2 . What are the traditional food products in Egypt and where they are located? Are they raw or processed?
- 3 . What makes these products distinguishable from similar products in other governorates
- 4 . Do you know if any of the products you mentioned is exclusive to the region or culturally rooted?
- 5 . Are you aware of any previous studies or reports that mentioned these products?
- 6 . What contacts do you recommend who have more information about the scope of the study or the products you mentioned?



## ANNEX 3: LIST OF PEOPLE INTERVIEWED

<i>NO</i>	<i>NAME</i>	<i>ORGANIZATION &amp; REGION</i>
1	Tarek Shorbagy	MSMEDA-North Sinai
2	Abdelrahman ElSehsah	MSMEDA-Aswan
3	Mohamed Nuby	Luxor University
4	Ashraf Okasha	Professor at Sohag University
5	Dr. Mennaat Allah El Dorry	Archaeo-botanist Expert- Cairo
6	Ekhlas Elzaghandy	Wahat field informant
7	Ali Abou Senna	Damietta field informant
8	Usama Elghazaly	Heritage food documenter-Qena governorate
9	Nahla Emam	Traditions professor
10	Ayman Samir	Siwa field informant
11	Mostafa El Refaey	Executive Chief Zooba- brand oriental food restaurant
12	Dr Nefissa Eid	National Nutrition Institute
13	Dr Habiba Hassan-Wassef	Key Expert
14	Monique Bagal	GI Expert (France)
15	Amr Abdel Meguid	CEDARE regional coordinator
16	Amgad Elqady	Agribusiness and Food Industry Ministry
17	Dr. Ekram	National Nutrition Institute
18	Mahmoud Bassiounyy	Federation of Egyptian Industries
19	Fathy Behery	Arab Beekeeper's Union
20	Dr Hassan Abu Bakr	Zaytouna Farm, former Organic Ag Olive Expert
21	Dr. Mohamed Abdelwahab	Desert Research Center
22	Dr. Marwa	Agriculture Research Center
23	Dr. Hesham Allam	Agriculture Research Center
24	Dr. Saad Nassar	Senior Advisor to Ministers, Ex Fayoum Governor
25	Dr. Mohamed Alansari	Kafr el Sheikh University, Ex FAO



## ANNEX 3: LIST OF PEOPLE INTERVIEWED

<i>NO</i>	<i>NAME</i>	<i>ORGANIZATION &amp; REGION</i>
26	Dr. Mohamed Deraz	Former president of DRC
27	Bianc Fleis	Food Expert
28	Nader Allam	Food Expert (Alex)
29	Mohammed Taha	Food Expert
30	Zahraa Saleh	National Research Center
31	Mohamed Haggar	Minya field informant
32	Mohamed Abdo	Food Exporter- Menia
33	Mohamed Osman	Kafr ElSheikh Field informant
34	Mohamed Abulaziz	Damietta field informant
35	Merna Adel	Assuit field informant
36	Khaled Maqlad	Qalyoubia key informant
37	Gamal Saad	Minya field informant
38	Hassan Mahdy	Nubia Field informant
39	Ahmad Amin	Palm Dates expert
40	Hany Elsalamony	Agriculture VCs expert
41	Khaled Shedid	Traceability Experts-LandOLakes
42	Mohammad Nabil	Agriculture VCs Expert

*Table 3 : Interviewee list*



## ANNEX 4: EVALUATION GRID

Category	4	3	2	1
<b>Typicity</b>	<p>1. Production/Processing uniqueness to area/region</p> <p>2. Characteristics of the product</p> <p>3. Relation of the product to local identity/culture</p> <p>Produced in a limited area with specific characteristics</p> <p>Unique intrinsic quality - no similar products exist elsewhere</p> <p>Product is embedded in culture of local people</p>	<p>Produced in different areas with the different characteristics</p> <p>Intrinsic quality, but it is difficult to perceive</p> <p>Product is considered by locals as an element of the local culture</p>	<p>Produced in different areas with same characteristics</p> <p>No intrinsic quality now, but there used to be one in the past</p> <p>Some people consider it as part of their local culture, but less and less</p>	<p>Produced in the whole country and elsewhere</p> <p>There is neither current nor past intrinsic quality</p> <p>It is not part of local culture</p>
<b>Physical</b>	<p>4. Reputation of the product to area/region/country</p> <p>5. Raw material genetics originate from the area/region</p> <p>6. Natural conditions determine product uniqueness</p> <p>7. Links between know-how and the territory</p> <p>The place owes its reputation to the product. The product shapes the territory/landscape/country</p> <p>Endemic and very local, making raw materials specific</p> <p>Natural conditions determine product uniqueness</p> <p>The product is exclusively developed in particular place using know-how available in the same location.</p>	<p>The product is integral part of the territory/landscape</p> <p>Not endemic but evolved over time with external genetic resources</p> <p>Natural conditions play a role with regard to processing methods (e.g., maturation, etc.)</p> <p>The link between know-how and production site is medium</p>	<p>The product has a little link to the territory/landscape</p> <p>Some material is local to the region, some material is imported from elsewhere</p> <p>Natural conditions play a role but not an easy one to prove.</p> <p>The link between know-how and production site is weak</p>	<p>The product does not represent the territory/landscape</p> <p>No, materials are imported from elsewhere</p> <p>Natural conditions do not play a specific role</p> <p>The product does not have a link to a particular place</p>
<b>Historical anchoring to the territory</b>	<p>8. The product exists since</p> <p>More than 500 years</p>	<p>Between 200 and 500 years</p>	<p>Between 60 &amp; 200 years</p>	<p>Less than 60 years</p>
<b>Collective dimension and link to local Know-how</b>	<p>9. Collective dimension and know-how transfer between generations</p> <p>10. Cultural and touristic events related to product consumption or production</p> <p>The know-how has a strong collective dimension and transferred between generation, including unique techniques and variants</p> <p>Several events and strong visibility campaign</p>	<p>The know-how has a collective dimension and transferred</p> <p>More than 1 event</p>	<p>The know-how exists but within a very limited group</p> <p>At least 1 event</p>	<p>There is no particular know-how</p> <p>No events</p>

Table 4 : Evaluation Grid with scoring scale



## ANNEX 5: GRADING SCALE

Category	Criteria contribution	Sub-category contribution	Grading				Product Assessment			
			4	3	2	1	4	3	2	1
Typicity	25%	5%	5	3,5	1,5	0				
			10	7,5	5	0				
			10	7,5	5	0				
Physical	30%	10%	10	7,5	5	0				
			5	3,5	1,5	0				
			5	3,5	1,5	0				
		10%	10	7,5	5	0				
			10	7,5	5	0				
			10	7,5	5	0				
Historical anchoring to the territory	25%	20%	25	22,5	17,5	0				
Collective dimension and link to local Know-how	20%	10%	10	7,5	5	0				
			10	7,5	5	0				
			100	76,5	46	0				

Table5 : Evaluation Grid Grading Scale









# FINAL REPORT

## *Inventoring of Egyptian Typical/Terroir Food Products*