

Pre-feasibility Study of the development of a OIC/IOFS Food Security Reserves - Report February 2021

Executive Summary

1. Background

1.1. Food Security Reserves are vital to OIC Countries

The Food Security Reserve and Grain Fund are a vital and core component of the IOFS programmatic strategy and response for securing food self-sufficiency and the prevention and containment of malnutrition and hunger across the OIC. The reserves are intended to cover food shortages in emergencies, natural disasters and other dire situations by ensuring supply is sufficient to meet demand especially in meeting humanitarian emergency aid to countries displaying extreme vulnerability through inability to meet their own natural crisis driven demand and/or when exacerbated by conflict.

The IOFS has already developed a policy framework and protocols for the Food Reserve. In support of the determination of the 2nd General Assembly, Jeddah Kingdom of Saudi Arabia, August 2019 resolutions in relation to the IOFS 5 Year Action Plan, the IOFS Secretariat prepared a background paper¹ outlining the parameters of the FSR in which it indicated that Food Security should be based on four principles:

- the availability of sufficient quantities of food products;
- economic affordability of food;
- consumption of the required amount of food in accordance with dietary standards;
- stable access to quality and safe food.

Grain stocks and reserves have an impact on prices for two reasons. First, the additional supply means that demand surges can be met and the supply and demand stay in some level of balance. Secondly, buyers can expect that supplies will be adequate so the uncertainty is reduced and an element of calm is provided to the market.

This proposal for development of an FSR effectively intends to solve the problems of food security of the OIC countries, as the FSR will address the whole spectrum of Food and Nutrition Security (FNS) through the so called “Food emergency principle of intervention”.

The OIC countries have various levels of food & nutrition security or insecurity. The Grain Fund will manage the FSR addressing the whole spectrum of food emergency measures in OIC countries, from prevention, relief, rehabilitation and development i.e. FSR should be stored in improved grain storage according to good storage practices.

The Grain Fund may manage the FSR for the three main categories, although with different approaches according to a FNS policy, strategy and existing FNS programmes of the recipient MS. The approach is a mix of bottom up and top down approaches. The 3 Categories define how the FSR proposes to address food crisis emergency, such as:

- Humanitarian food aid in Category 1;

1 Annex 12 – Annex Resolution № IOFS/GA/1-12-2019 Explanatory note on report on the 5-year Action Plan (adopted by the 1st IOFS General Assembly)

- Structural ones challenging the interlocking needs of humanitarian relief and capacity-building to prevent emergencies and prevent chronic FNS with the existing range of programmes mobilized at country levels in Category 2, and
- Category 3 with more integration of medium term FNS policies requiring public reforms to address the principles of the « Right to Food » and «One health» in OIC countries.

The three Categories of the recipient MS countries are distinguished according to their FNS policy, strategy and existing FNS programmes for mobilizing the FSR:

- Category 1: country where no FNS institutional support is in place or cannot be used because of the situation,
- Category 2: country implementing FNS programmes & projects and,
- Category 3: country implementing FNS structural reform

Country categorization of the 3 levels is dependent on the prevailing situation in each MS. The upper level being the most elaborate with regional FNS programs addressing the food and nutrition circumstance with preventive and corrective measures according to established criteria. However these third level interventions require much more time to construct, as it requires structural reforms in each MS country according to the FNS institutional situation, and related to the particular characteristics of a regional policy situation. The subsidiarity level will have to apply for any OIC country from local – national – regional and interregional level. This means the Grain Fund will build physical FSR from local stocks to the global OIC FSR in any MS country participating in the scheme. The stock at the OIC global level will be comparatively small.

Each country will have or need different tools to manage FNS. It is necessary to modernize the existing cooperation intra-OIC countries to an international arena in the field of food security as it will strengthen FNS complementarity aiming to mitigate individual vulnerability. The Food Security Reserves will be used for sudden shocks (war, displaced people, natural disasters, pandemic and economic shocks) and preventive measures (safety net, insurance, poverty alleviation) to reduce vulnerability from chronic shocks (recurrent natural disasters and economic problems) according to the principle of subsidiarity (from local-national-OIC FSR)

The subsidiarity process would require any OIC programme to rely on supplies from smallholders' surpluses as much as possible for the developmental effect to be successful, using regional supplies, aimed at a balance between regional surpluses and deficits. Addressing food crisis at local level should be foreseen as aiming so as not to disrupt the local market with external food aid, but on the contrary supporting them with local solutions that will strengthen their resilience. These may be topped up where necessary from outside sources, but it will be preferential to be from countries, if possible in the same continent. The participatory approach for building stock from the local level is suggested also to develop the private agri-food sector in MS countries (understood to include smallholder farming and informal food trading), as well as domestic and regional trade in agricultural and food products.

It is recommended that the Grain Fund will also emanate from regional programmes for grain management and food sovereignty.

External agencies are needed to assist building the food reserves. They will have experience in the agricultural and commercial situation of any region or country where they operate. Their role is to participate in domestic generation for food and nutrition security bringing to bear experience from other programmes.

The quantitative and qualitative benefits for the OIC countries from this project at the global, regional and national levels

The IOFS Steering Committee will need to respond with FSR to FNS situations in various OIC regions. One-size-fits-all Categories and intervention design will not work due to the importance of addressing the prevailing circumstances of one or more countries in a particular region.

A regional FSR could be very much challenged to respond on its own to a substantial food crisis, like those provoked by major natural disasters such as climatic shocks, pandemics, political disasters (war, civil unrest) or economic shocks (significant increases in food prices, national or global economic downturn). Therefore, the best approaches are those which are decentralized and developed under the 3 Categories. In any category a first line of defence lies in nearby stocks for communities to mobilise, a second line is national stocks, which national arrangements can make use of and a third line is the regional reserve and mechanisms of solidarity between OIC countries within a geographical region. The last line of defence being at the international level, being the global OIC FSR. Each line of defence must take to consideration and pursue twin goals of the FNS:

- respond usefully to the needs of people affected by hunger, while sustainably strengthening their future capacity to withstand such shocks.
- no country should rely permanently on food aid in order to guarantee its citizens' right to food it is necessary to use the FSR also for longer-term preventive measures.

An important question is where grain stocks are located and at what level they are controlled. They can be anywhere from a village grain bank to a global virtual reserve managed by the IOFS Steering Committee of FSR; and be at several different levels simultaneously. Any decision on the FSR management will depend on full understanding through comprehensive data of the nature of hunger and food shortages across the OIC.

There are two broad alternative views:

- Hunger can be seen as an essentially personal, household or local problem: each hungry person faces hunger in their own place and because of their own predicament. Resolving this requires an assurance everywhere of local access to food, fulfilling each citizen's right to food. That implies a bottom-up system, based on local and then national provision in the first instance.
- Hunger is caused by the inadequacy of supplies on organised markets, and especially global markets in food products. This leads to an emphasis on the volumes of global supply and proposals for global or perhaps regional stocks.

Determining a too high a level for food reserves (and food policies generally), and concentrating on aggregate production and availability only, can lead to neglect of the vital question of access to food and other local considerations of supply and demand and/or interruption to food supplies such as post-harvest losses. In many places a household or village grain store can be built in a day and cost very little. Village or household stores need to be improved or provided for, regardless of global decisions of provision, although the FSR has a role to play in strengthening availability and access to address the FNS of the OIC populations.

1.2 Aims and scope of an emergency food reserve

Implementing an emergency reserve system requires an operational definition of a food emergency. Traditionally, a food crisis emergency could be defined as "the state or condition having suffered extreme and unexpected natural or man-induced calamity, which is unable to cope with such state or condition through its food national reserve and is unable to procure the food need supply through

normal trade". Under the traditional notion of food security, a food emergency is associated with natural calamity or large-scale conflict, with humanitarian food aid as a typical response. However, other factors are also considered nowadays due to experience.

The 2008 price crisis began a serious re-examination of the concept of food emergency to include large and sudden price increases, owing to abnormal market movements. This sudden price increase came from the low grain yield at the global reserve, that had been exacerbated with some speculative price movements propounding the scarcity of the grain reserve. This led to export bans from main grain producers with the consequence of sudden price increases in countries that traditionally had an import of grain as a buffer to compensate their national production.

The notion of « un-expectation natural or man-induced calamity » has also changed in recent years because an expected food crisis would lead to an emergency food aid response in the event that the chronicity of a food crisis is not effectively anticipated properly. It is noticeable that with milking mother malnourishment and children's stunting and underweight have their origins from the effects of chronic food insecurity. In this regard the FNS response should also consider preventive measures where FSR also have their role to play.

Estimating the appropriate level of emergency reserves is a complicated issue of balancing food security benefits against the high costs of food storage. Moreover, alternative storage and release modalities would need to be incorporated into the calculation. For instance, private sector storage may be a lower-cost option than state agency storage, particularly under a business climate favourable to the private sector development of grain supply chains. Emergency reserves may be supplemented with other risk instruments, such as maintaining an emergency fund as well as financial instruments linked to emergencies (e.g. commodity futures and derivatives).

Advantages of joining the OIC Food Security Reserves:

1. The FSR encourages international solidarity to streamline support and complement the work carried out by the Member States to provide quick and diversified food and nutritional aid, based on the specific needs of the various communities hit by cyclical shocks, through regional safety tools that combine food and financial resources;
2. The FSR will support regional solidarity across Member States and populations affected by cyclical food crises, through transparent, equitable and predictable mechanisms. It will enhance local, national and regional capacities in crisis management and preparedness as part of an approach based on subsidiarity.
3. The FSR will contribute to food sovereignty and strengthen the regions and sub-region's political, economic and commercial links, by developing synergies within programs that target growth in agricultural production, market facilitation and regulation, promotion of social safety net, and risk prevention and management to improve the resilience of the vulnerable population.

1.3 Developing an FSR

In establishing an operationally effective food reserve it is necessary to consider how those key principles are met through identification of the modalities and mechanisms by which:

- reserve stocks are established whether in terms of hard commodities (wheat rice etc.) or in accessible financial support for the purchase of food from other reserves
- stocks are progressively built up and replenished and are in quantities that relate to the demand in a particular region

- stocks are protected physically from destruction or pest/ disease deterioration
- food types are compliant with dietary and cultural norms of the countries supplied
- reserves of food are accessible, easily and timeously transportable to the areas of need
- transport and distribution mechanisms are secure, guaranteed and food in transit is protected through refrigeration etc.
- infrastructure for the networks of transport is compatible with the means of transport available – roads, rail, air and sea
- trade controls and tariffs between countries do not prohibit exchange
- safety standards are agreed between MS and processes ensure compliance to those standards
- market food prices amongst MS are controllable in a manner which does not outreach affordability

1.4 Undertaking a Feasibility Study

To be able to assess and evaluate the parameters of the FSR a feasibility study needs to be undertaken which analyses how individual countries, regions, governments and donors (public and private) can collectively contribute to the modalities and mechanisms set up above by obtaining detailed data and agreements on:

- demographics relative to population size and severity of food shortages;
- country and regional resources for self-sufficiency in food reserves – production, consumption and surpluses;
- country/regional capacity and capability to respond to food shortages - existing channels for distribution etc.;
- production capacity, reserve accumulation and restocking capability;
- storage capacity and quality controls for preserving stocks;
- access to reserves whether through government, donor, charity or other forms of humanitarian aid;
- quantification of real-time statistical data, analysis and data sharing – through existing or redeveloped databases;
- import /export volumes relative to the net provision of food per capita (food balance);
- establishment or ratification of existing trade relationships and cross border tariffs/ export regulations;
- current networks for distribution – transport and transporters capacity for rapid distribution and in-transit food ‘quality’ protection;
- establishing relevant/ ‘ideal’ location of reserves to facilitate supply and demand in a predetermined (country- group) coverage area.

On the 9th November the IOFS Secretariat convened a virtual conference at which representatives of a selection of member states² of IOFS discussed the Draft Protocol of the OIC Food Security Reserves which was later revised to a Memorandum of Understanding (see Appendix 5). In addition to discussions and agreements on amendments and additions to the draft protocol/ memorandum the representatives noted the necessity to conduct a feasibility study with deep and detailed analysis of the regions. The feasibility study will determine the regional country-groupings, volume and types

² Kuwait, United Arab Emirates, Kingdom of Morocco, State of Qatar, Republic of Azerbaijan, Republic of Turkey, and the Republic of Kazakhstan

of food commodities, and the physical infrastructure and related storage/ distribution mechanisms and controls. The conference further discussed the role of Food Security Reserves in building sub-regional food stocks, tailored to the needs of each regional group within the OIC member states. The Food Security Reserves would consist of wheat and/or other principal food products or a combination thereof, as selected by the member states.

The Reserves would be administered by the Steering Committee of the OIC Food Security Reserve. The member states undertake to:

- provide adequate storage facilities for the earmarked food-grains;
- to inspect the food grains periodically and to apply appropriate quality control measures and to replace any food-grains that do not satisfy the said standards.
- ensure the member states must comply with the guidelines on storage and quality control as adopted by the Steering Committee.

These basic principles underpin the ethos and mission of the FSR.

However, whilst these aspects serve to define the management of the food reserves they do not define the modalities and mechanisms beyond stocking and replenishment. As has been outlined above the technical infrastructure surrounding the stock needs to be established from production through storage to distribution for the FSR to be effective.

The objective and results of the feasibility study would therefore be:

‘To establish an effective framework for the establishment of an IOFS Food Security Reserves and Grain Fund which takes to account the food needs of participating member states, determines the appropriateness of the location(s) of the ‘storage’ facilities of the reserve and the mechanisms for management of the reserve’.

The study should investigate, review and report on:

- IOFS country and regional demographics relative to population size and severity of food shortages;
- Country and regional resources for self-sufficiency in food reserves – vulnerability;
- Ability of a country or region to respond to food shortages on its own;
- Production capacity and reserve accumulation and restocking capability – including volumes and types of food;
- Storage capacity and quality controls for preserving stocks;
- Access and distribution channels whether through government, donor, charity or other forms of humanitarian aid;
- Quantification of those dimensions through real-time statistical data, analysis and data sharing;
- Import and export data relative to the net provision of food per capita;
- Trade relationships and cross border tariffs/ export regulations which facilitate ease of access to food reserves through related distribution channels;
- Distribution networks – transport and transporters capacity for rapid ‘refrigerated’ distribution and in-transit food ‘quality’ protection;
- Location and relevance of placement of food stocks relative to ease of access of stocks taking to account distribution networks, time lags on distribution etc.;
- Environmental and climate conditions which may affect the effective operation of the FSR;
- Other risks that may affect a country or region from effectively operating food reserve and humanitarian aid food distributions due to political or civil unrest, insurgency or food theft;

- Regional Groupings of member states which best serve the effective and efficient supply and demands on the reserve, distribution etc.;
- The development of new/or access to existing comprehensive database(s) of information related to the operations of the FSR to monitor the supply and demand for food security reserve interventions and the management of the reserve;
- The financial parameters of the FSR and determination of the size of contributions of member states;
- Composition of the Steering Committee and Secretariat of the FSR and MS committees;
- Finalisation of the content Protocols of the FSR including estimated and agreed schedule of quantities of the FSR stock to be provided by participating member states;
- The costs associated with the development and operational recurrent costs of maintaining the FSR

The feasibility study should be conducted through:

Desk research and review

- ✓ Consultations with member states, donors, charities and other public and private entities who may contribute / partner the FSR;
- ✓ Physical interventions for the assessment and evaluation of the geographical and other logistical dimensions affecting the FSR;
- ✓ Interrogation of international and other regional databases of information on food production, supply and demand, market food prices and availability of financial resources for the FSR;
- ✓ Consultations with other food security organisations to examine experiences and learning – for example ECOWAS (RAAF) / ASEAN+3 / IFPRI / FRA Zambia³.

1.5 Composition of the Member States committed to support for the development of the FSR

In the preamble to this pre-feasibility study we have cited the commitment of the IOFS member states of Kuwait, United Arab Emirates, Kingdom of Morocco, State of Qatar, Republic of Azerbaijan, Republic of Turkey, and the Republic of Kazakhstan to the development of the FSR. Whilst some of these states fall into the category of some form of vulnerability to support from the Food Reserve there are many other states who are more vulnerable and require intervention.

The feasibility study would, to ensure a comprehensive analysis of the parameters of the interventions required by the FSR, require including in the investigation an analysis at least one country and/or region that is ranked at the most vulnerable level. We elaborate on the rationale behind this in the body of the main report.

1.6 Possible Regional Structure of the FSR

The structure of the FSR is dependent upon a number of dimensions as indicated above related to:

- Geography - spread and size of regional demarcation
- Comparative advantage of each country for cash-physical reserve
- Numbers of countries demarcated by those regional areas
- Size of the regional structure – ease of management and co-ordination of logistics

3 [FRA – Securing National Food Reserves, Taking Wealth to Rural Zambia](#)

- Degree of self- sufficiency - accessibility and affordability of food
- Degree of need for support – recurrent food shortages, emergency and humanitarian relief for naturally occurring disasters (forecasted and/or unexpected)
- Ability to create/store reserves – facilities (existing or newly constructed)
- Distribution networks – transport infrastructure (road/rail /sea and air) and rolling stock (lorries, trains, planes, ships) and ports of entry/ departure (coastal / inland)
- Ease of transportation – geographical distance of related MS groupings
- Existing opportunities for FSR through other bilateral /multilateral frameworks (ECOWAS/ASEAN+3 /Oxfam etc.)
- Desirability /Barriers to engage in the IOFS/OIC FSR Framework – membership of other communities, political solidarity or sovereignty
- Willingness to commit to sizeable capital and other operational costs of the system.

The two figures below consider potential groupings of country based initially on geographic proximity. However consideration should be also given to distances, communication links and distribution networks, location of ports of entry import/export and political parameters. For example Guyana / Suriname have not logical correlation to other MS, and grouping 4 forming Central Africa countries do have borders linking to West Africa (ECOWAS). Similarly Pakistan is geographically border with Afghanistan but likely more culturally linked to Bangladesh. Where groupings become large management and logistical issue come in to play which may require division by sub-grouping. This may also be a pertinent consideration when MS may consider that their existing bilateral association with other existing FSR are more advantageous to their needs (ECOWAS, ASEAN, CARICOM)

Figure: Without other FSR such ECOWAS and ASEAN Plus Three

No	Regional FSR	Countries	Type of food commodities	Total volume (000, thousand tons)
1	Middle East (12)	Palestine, Yemen, Syria, Jordan, Iraq, Lebanon, Oman, Bahrain, Saudi Arabia, UAE, Kuwait, Qatar	wheat	350
2	South Asia (3)	Bangladesh, Pakistan, Maldives,	rice, wheat, corn	TBD
3	South America (2)	Guyana, Suriname	rice, cassava, corn	TBD
3	East and Southeast Africa (6)	Comoros, Sudan, Somalia, Uganda, Djibouti, Mozambique, Maldives	rice, millet, wheat, cassava, lentils, corn	180
4	Central Africa (3)	Chad, Cameroon, Gabon	millet, sorghum, wheat, cassava, rice	76
5	West, North and Northwest Africa (6)	Mauritania, Libya, Tunisia, Egypt, Algeria, Morocco	rice, wheat	332

6	Europe, Central Asia, Kazakhstan, Iran, Turkey and Azerbaijan (10)	Albania, Afghanistan, Tajikistan, Kyrgyzstan, Uzbekistan, Azerbaijan, Turkmenistan, Iran, Kazakhstan, Turkey	wheat	350
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Figure: With other FSR such ECOWAS and ASEAN Plus Three (volume should be adjusted)

No	Regional FSR	Countries	Type of food commodities	Total volume (000, thousand tons)
1	Europe and Middle East (15)	Palestine, Yemen, Syria, Jordan, Iraq, Lebanon, Oman, Bahrain, Saudi Arabia, UAE, Kuwait, Qatar, Turkey, Iran, Albania*	wheat	448
2	South Asia (4) + ASEAN (2)	Bangladesh, Pakistan, Malaysia, Indonesia, Brunei Darussalam	rice, wheat, corn	TBD
3	South America (2)	Guyana, Suriname	rice, cassava, corn	TBD
3	East and Southeast Africa (6)	Comoros, Sudan, Somalia, Uganda, Djibouti, Mozambique, Maldives	rice, millet, wheat, cassava, lentils, corn	180
4	Central Africa (3)	Chad, Cameroon, Gabon	millet, sorghum, wheat, cassava, rice	76
5	West, North and Northwest Africa (6) + ECOWAS (12)	Mauritania, Libya, Tunisia, Egypt, Algeria, Morocco, Benin, Burkina Faso, Cote d'Ivoire, Gambia, Guinea, Guinea Bissau, Mali, Nigeria, Niger, Senegal, Sierra Leone, Togo	rice, wheat, millet, sorghum, wheat, cassava,	359
6	Central Asia, Kazakhstan, and Azerbaijan (7)	Afghanistan, Tajikistan, Kyrgyzstan, Uzbekistan, Azerbaijan, Turkmenistan, Kazakhstan	wheat	252

**Albania, Iran and Turkey could equally be part of a Europe, Central Asia Group +2*

1.7 In Conclusion

The concepts of the FSR are fully understood and articulated by the interventions and actions so far undertaken by the IOFS Secretariat. To be able to formulate a definitive action plan for the design, development and implementation of the FSR, a full review as described by this pre-feasibility study is required to validate the modalities and mechanisms to be adopted.