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GROWTH FOR RURAL ADVANCEMENT AND SUSTAINABLE PROGRESS



Capacity Assessment Report Sindh Food Authority

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Growth for Rural Advancement and Sustainable Progress

Capacity Assessment Report

Sindh Food Authority

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This report has been authored by ITC's national consultant, Dr. Zaffar Mehmood. The views expressed in this report are those of the author's and do not necessarily coincide with those of the International Trade Centre.

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Acronyms:

| | |
|--------------|---|
| GRASP | Growth for Rural Advancement and Sustainable Progress |
| ITC | International Trade Centre |
| MSME | Micro, Small and Medium Enterprises |
| SFA | Sindh Food Authority |
| PSQCA | Pakistan Standard and Quality Control Authority |
| PCRWR | Pakistan Council of Research in Water Resources |
| FSO | Food Safety Officer |
| SOPs | Standard Operating Procedures |
| MOUs | Memorandum of Understanding |
| FAO | Food and Agriculture Organization |
| OIE | World Organization for Animal Health |
| WTO | World Trade Organization |

Chapter 1: INTRODUCTION

The International Trade Centre (ITC) is the joint agency of the World Trade Organization (WTO) and the United Nations (UN). It is the only development agency that is fully dedicated to supporting the internationalization of micro, small and medium enterprises (MSMEs). ITC's mission is to foster inclusive and sustainable economic development and contribute to achieving the United Nations Global Goals for Sustainable Development. ITC is implementing the EU funded 'Growth for Rural Advancement and Sustainable Progress' (GRASP) project which aims to contribute to the reduction of poverty through development of rural MSMEs in selected districts within two provinces of Pakistan: Balochistan and Sindh. GRASP will focus on selected product lines within livestock and horticulture. GRASP will take a holistic approach to building MSME competitiveness in agribusiness value chains starting from a deep understanding of markets and working back through the value chain to enable MSMEs and ultimately producers to create and capture additional value. To do this, GRASP will implement three outputs:

- **Output-1.** Institutional capacity strengthened and business environment improved for rural MSME development
- **Output-2.** Agribusiness service providing MSMEs (run by Male/Female) and their BIOs are capacitated to enhance primary production and quality.
- **Output-3.** Commercially operating MSMEs (Male/Female) are trained in appropriate environmentally sustainable technologies value and enhance marketed volumes

Under output 1, GRASP will provide support to strengthen the regulatory and institutional frameworks in the areas of domestic commerce, agricultural policies and quality and SPS at the federal and provincial levels, to enhance the competitiveness of rural MSMEs. Under the quality and SPS component of output 1, GRASP will be providing technical assistance to the Balochistan Food Authority (BFA) and Sindh Food Authority (SFA) to strengthen their institutional and technical capacities (including those of the human resources), improve their service portfolio and compliance mechanisms and effectively perform their functions in laying down standards, procedures, processes and guidelines in relation to food in the province (including food business, labeling, additives etc.). In this context, GRASP is undertaking a comprehensive institutional capacity assessment of the two food authorities to identify the areas and activities in which there is a demand for technical and institutional assistance and to develop a plan for the strengthening of the two institutions according to the needs and aspirations of stakeholders, mandate of the institution and best international practices. Subsequently, GRASP will provide further technical support to implement the findings of the assessments.

Chapter 2 Sindh Food Authority: Institutional Framework

Introduction

Sindh Food Authority (SFA) came into force under SFA Act, 2016 having been passed by provincial Assembly of Sindh on March 08th, 2017 and assented to by the Governor of Sindh on April 08th, 2017 and published as an Act of the Legislature of Sindh. Pursuant to section 3 (1) of SFA Act 2016, the Government of Sindh has notified the establishment of SFA under the Chairmanship of Minister of food on May 3rd, 2018. In this short period of time and limited resources SFA has performed its operations across Sindh province. For example, Sindh Food Authority issued more than 6000 improvement notices to the food businesses, sealed 10 premises, conducted 130 operations, and banned many products such as loose oil/ghee, loose spices, Monosodium glutamate, slaughtering of young calves and calcium carbonate till now based on scientific panel recommendations.

Power and Function of Food Authority:

As per Sindh Food Authority Act 2016, following powers and functions are assigned to Sindh Food Authority.

- A. regulation and monitoring of the food business to ensure provision of safe food to consumers.
- B. Sindh Food Authority can
 - formulate standards, procedures, processes and guidelines in relation to any aspect of food including food business, food labeling, food additive, and specify appropriate enforcement systems;
 - specify procedures and guidelines for setting up and accreditation of food laboratories;
 - formulate method of sampling, analysis of samples and reporting of results;
 - specify licensing, prohibition orders, recall procedures, improvement notices or prosecution;
 - determine terms and conditions of service of its employees;
 - provide scientific advice and technical support to the Government in matters relating to food;
 - collect and analyze relevant scientific and technical data relating to food;
 - establish a system of network of food operators and consumers to facilitate food safety and quality control;
 - organize training programs in food safety and standards;

- promote general awareness as to food safety and standards;
- levy fee for registration, licensing and other services;
- certify food for export;
- perform any other function as may be prescribed; and
- do any other thing which is incidental to or necessary for the discharge of its functions under this Act.

This act also states that in order to perform its functions SFA based on well-established scientific principles and international best practices.

Duties of food authority:

Sindh Food Authority drafted food safety regulations are in the process of legal vetting. As per SFA draft food regulations following are duties of Sindh Food Authority.

1. take steps for the creation of the post of one Food Safety Officer for every 500,000 population or part thereof and for his appointment; ensure that the Food Safety Officer collects a minimum of 100 samples a month, and an ex-officio Food Safety Officer, at least 20 samples a month;
- (1) maintain permanent registers of licensees category-wise as required under these rules;
- (2) ensure that the cases of food offence cases are neither withheld nor are they compounded, without the approval in writing of the Government;
4. maintain permanent record of the prosecution of food offenders and of the revenues from the costs realized
5. enforce the provisions of the Ordinance and the rules;

(2) The Food Authority shall, within a period of seven days of the receipt of copies of the report of the result of analysis, before initiating prosecution, forward a copy of the report of the said analysis, by registered post or by hand, to the person from whom the sample of the article was taken by the Food Safety Officer and also to the person, if any, whose name, address and other particulars have been disclosed under rule 5.

(3) Where a Food Authority, without reasonable cause, fails to enforce the Ordinance and the rules for a period exceeding six months, the District Coordinator Officer may invoke.

Mandate to frame Regulations:

Sindh food authority act 2016 empowers Sindh Food Authority to frame regulations such as:

1. procedure for transaction of business of the Authority;
2. terms and conditions of service of the employees of the Authority;
3. procedure and conduct of business by a scientific panel;

4. standards and guidelines in relation to any food, food places, food workers and food handlers;
5. limits of additives, contaminants, toxic substance, heavy metals pesticides, veterinary drugs, residues, in the food;
6. marking, packaging, labeling, advertising and warranty of any food;
7. food recall procedures, improvement notices and prohibition orders;
8. licensing and registration procedures;
9. inspection of food business, safe and hygienic storage and transportation practices;
10. recognition and accreditation of laboratories and scale of fee for a laboratory test;
11. search of a premises, vehicle or person and guidelines for taking and handling samples of any food;
12. prosecutions and appeals under this Act; and
13. finances, accounts, budget and reporting procedures.

Composition of Food Authority:

As per food authority act 2016 following is composition for food authority:

- (1) The Food Authority shall consist of—
 - (a) Minister/Advisor on Food, Sindh. Chairperson
 - (aa) Chairman, Standing Committee on Food. Member
 - (b) Secretary to Government, Food Department, Sindh. Convener Composition of the Food Authority.
 - (c) Secretary to Government, Health Department, Sindh. Vice Chairperson
 - (d) Secretary to Government, Culture & Tourism Department, Sindh. Member
 - (e) Secretary to Government, Agriculture, Livestock Department, Sindh. Member
 - (f) Secretary to Government of Sindh, Social Welfare Department. Member
 - (g) Secretary to Government, Local Government Department, Sindh. Member
 - (h) Secretary to Government of Sindh, Public Health Engineering Department. Member
 - (i) Three Members of Provincial Assembly to be nominated by the Speaker. Members
 - (j) One representative from Chamber of Commerce & Industry. Member
 - (k) One food technologist or scientist to be nominated by Government. Legal Advisor Member
 - (l) One representative of food operators. Member
 - (m) One representative of food operators and food industry. Member
 - (n) One representative of consumers. Member
 - (o) Any other member/respective Divisional Commissioner, as co-opted by the Chairman of the Authority. Member

(2) Government shall appoint the non-official members on the recommendation of a committee consisting of the following: -

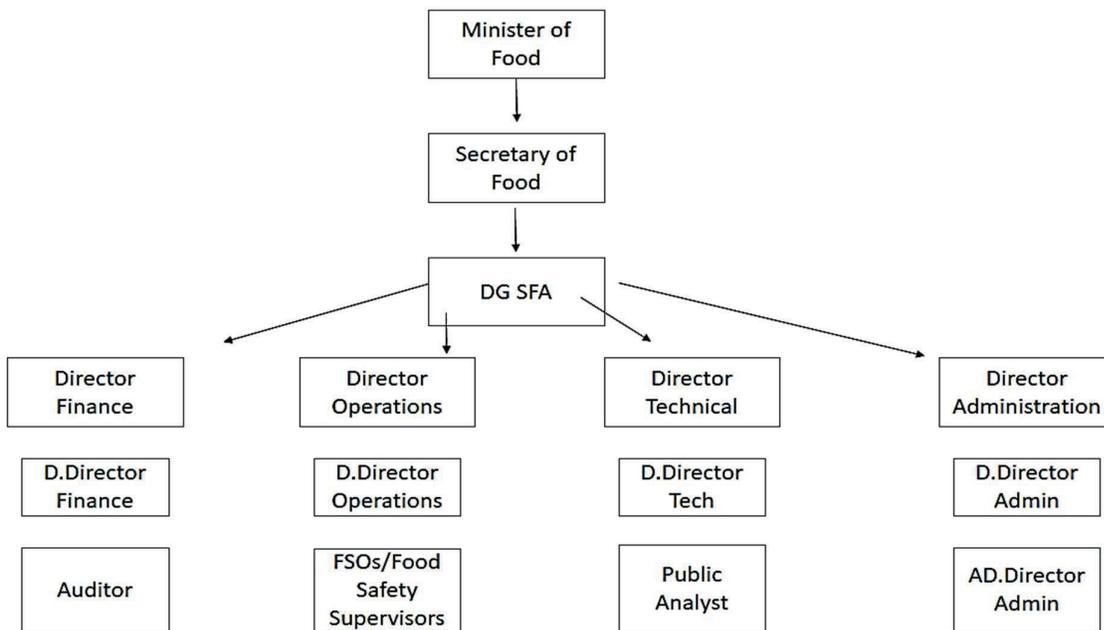
- (a) Secretary, Food Department, Government of Sindh. Convener
- (b) Secretary, Health Department, Government of Sindh. Member
- (c) Chairperson, Department of Food Sciences, University of Karachi. Member

(3) The Authority may, with the simple majority, co-opt any other person as a member but such person shall have not right of vote.

(4) The members, other than ex-officio members, shall be appointed in such a manner as to ensure the highest standards of professional competence and experience.

Organogram

Director General of SFA is managing four directors under his supervision, these directors oversee the following activities (operations, finance, technical and administration). Furthermore, there are 3 deputy directors managing central, east, south and Korangi districts.



Constitution of Sindh Food Authority Scientific panel

As per Sindh Food Authority Act a scientific panel is constituted. The chair of scientific panel of SFA is Director General of SFA with a total number of 10 members from different domains such as specialists of public health, food safety and technology and Islamic studies. Sindh Food Authority Act 2016 frames requirements for Scientific panel as below:

(1) The Authority may establish one or more Scientific Panels, which shall consist of the following:-

- (a) Director of the Food Authority (Convener);
 - (b) a representative, having background of food science or technology, of an organization established for determining standards and quality of food;
 - (c) a representative, having background of food science or technology, of an organization established for scientific or industrial research on food;
 - (d) a representative, having background of food science or technology, of the Agriculture University Tandojam;
 - (e) a food technologist or scientist; Scientific Panel.
 - (f) a medical practitioner registered with Pakistan Medical and Dental Council; and
 - (g) one representatives of the food manufacturers in the relevant field.
- (2) A Scientific Panel may co-opt any other member from the relevant industry.
 - (3) The Authority shall determine the terms and conditions, including tenure of members of a Scientific Panel other than ex-officio member.
 - (4) The Authority may refer any matter relating to food to the Scientific Panel for recommendation.
 - (5) The Scientific Panel may, after due deliberations with the relevant industry and consumer representatives, make recommendations to the Authority on standards, products, procedures, processes and guidelines in relation to any technical aspect of the food.
 - (6) If the Authority does not agree to the recommendations of the Scientific Panel, it may, with reasons, refer the case back to the Scientific Panel for reconsideration.
 - (7) The Scientific Panel shall reconsider the reference and forward its reconsidered recommendations and the Food Authority shall act accordingly.

Role Scientific Panel:

As per SFA draft food regulations following terms of reference are applicable to scientific panel:

- The Authority may refer any matter relating to food to the scientific panel for recommendation.
- Scientific Panel may, after due deliberations with the relevant industry and consumer representatives, make recommendation to the authority on standards, products, procedures, processes and guidelines in relation to any technical aspect of the world.
- If the authority in case does not agree to the recommendations of the scientific panel, it may the reasons, refer the case back to the scientific panel for reconsideration. The scientific panel shall reconsider the reference and forward its reconsidered recommendations and the food authority shall act accordingly.

Chapter 3: Operational Readiness

Infrastructure:

Acquiring of building and necessary infrastructure is at preliminary stage with only headquarter office available, SFA has yet to establish regional offices and its own basic set up laboratory infrastructure. Preliminary the role of laboratory support for achieving the quality and safety perspective of the trade is yet to be aligned with local and global needs. In the below given text the role of regulator and laboratory support for local sale and export sectors are discussed separately due to their versatile nature. SFA was made active in 2018 whereas Assistant Food Safety Officers were recruited in 2019. Recruitment of a few laboratory staff members has been done: However, only 6 lab technicians are hired while research officers, and lab managers/experts are still not hired. Instead of its own set up, some private and public labs are being used for third party laboratory services for SFA: PSQCA-Karachi, SGS, Intertek, Qarshi labs, AIC-ICCBS are being used for food samples while PCRWR (Pakistan Council of Research in Water Resources) for water testing. These third party services are expensive in nature and not feasible in terms massive analytical demands not only for compliance in case of field testing but also as mandatory requirement for registration/licensing of food products in province.

Recently, PC-1 for establishment of food control laboratory and two mobile van labs was approved. Based on inflation in Pak Rupee and escalation of prices due to USD current value it is expected the funds allotted for establishment of labs would not be sufficient for basic analytical set-up proposed in PC-1 (Annex). Gradually labs in other parts of Sindh would be required for compliance issues. For example 5 mobile labs along with central labs are required for Sukkur, Larkana, Mirpurkhas, Kashmore, and Hyderabad districts on priority basis.

Operational activities

On operational grounds, the operation wing has started its field work and in order apprise food business operators about new food safety regulations and compliance with Sindh Food Authority regulations. To start ground work director operations held initial meetings with major stakeholders including the chairman Pakistan Hotel Association, chairman All Pakistan Restaurants Association, Chairman Pakistan Dairy Association, Bakers/Sweets and Nimco, Milk Producers, Milk Wholesaler and Retailers Associations/stake Holders. These food business operators were informed about new food safety regime and were sensitized about role of safe food for human health and legal requirements as per newly drafted Sindh Food Authority regulations. The Chairmen of Associations have been convinced to influence other members to bring necessary improvements in the light of notices and checklist. Accordingly, all chairmen/stake holders of association have assured to cooperate with SFA for sustainable change.

In Pursuance of Improving notices, field inspections/surprise visits have been started under Section 17 & 43 of SFA 2016. The Final Improvement Notices followed by the Checklist have been served to different stakeholders. Altogether 139 number food business operators have

been served final improvement notices to Restaurant, Bakers/Sweets & Nimco and Hospital Canteens.

Sindh Food Authority has taken many operations in major cities such as Karachi, Hyderabad, Mirpur Khas, Larkana, Shikarpur on hotels and bakeries, substandard oil sellers, expired meat sellers, sweet and bakery shops and hotel and restaurant operating under unhygienic conditions or selling sub-standard foods. Major food commodities where punitive actions were taken include, diary, mineral water, vegetable oil and ghee and street foods. Sindh Food Authority uncovered malpractices and adulteration in food and took punitive measures to curb such practices. Majority of operations involved sealing of premises such hotels and restaurants and factories due to unhygienic conditions or use of expired food ingredients or food items at these premises. SFA have issued many warnings to business operators in case of non-compliance of Covid-19 SOPs or food standard violations.

Registration and Licensing of food business:

The activity of registration and licensing of food business operators has started its operations from Karachi headquarter. Sindh Food Authority has sealed sixty six (66) illegal factories under Section 17 & 43 of SFA Act 2016. After satisfactory reports received from the accredited laboratory and payment of penalty/fine, the factories have been re-opened with the condition to comply as per checklist. The operation team of SFA have imposed penalty/fine on more than fifty (50) different Food Business Operators under section 26 & 32 of SFA 2016. According to the law, Authority shall impose fine which may extend to Rs. One million with imprisonment for six month, or both. The SFA have lodged 14 First investigation reports (FIR) with police stations against different illegal factories under Section 32 & 43 of SFA Act 2016 till now.

Currently, in pursuance of report/findings of PCRWR, Ministry of Science & Technology, Government of Pakistan, the SFA has banned 17 different Mineral Water companies in Sindh province. Further to this, slaughtering of calves, selling of carbonated beverages in educational institutes, sale of loose spices, calcium carbide as fruit ripening agent, rangkat bleaching agent, sale of open ghee/oil have also been banned and operations against sale of these items is continued. Consumer awareness activities have been a hallmark of Sindh Food Authority as majority of food operations carried out by SFA were highlighted in mainstream media channels. In many cases Food Authority raids were conducted in presence of media channels and popular television programs and reality shows were involved to create awareness about Food Authority actions and malpractices in food sectors. SFA is working on 5 priority sectors (meat, spices, dairy, oil and water) at first phase to improve the food safety situation in Sindh.

Status of SFA Regulations:

After the approval of SFA Act 2016, Sindh Food Safety Regulations 2018 is drafted and it is waiting for approval from law department. It includes duties, powers of FA, licensing and registration for food businesses, sampling and procedure of seizure, medical fitness of food workers, prevention of food poisoning, regulations for food establishment and regulations related to each food category with respect to composition, additives etc. several relevant food regulations and food standards are needed to be drafted and approved to cover maximum food

safety compliance and harmonization of these standards at national and sub-national level. These suggested guidelines, regulations and standards are mentioned in subsequent chapters and recommendations.

Enforcement Mechanism

Enforcement of food safety regulations by food authorities depends on enforcement mechanisms. Existing Food Authorities in Pakistan have devised enforcement tools such as improvement notices, prohibition orders, food recalls etc. However, SFA has yet to have these enforcement tools in the form of duly notified regulations.

Chapter 4: Need Assessment of Sindh Food Authority

Human Resource requirements

As discussed in previous chapter, recruitment of human resource is a limitation for operation of Sindh Food Authority. This process is further hampered due to absence of service rules for Sindh Food Authority staff. In the absence of such service rules field staff remains uncertain about job security which in turn impacts performance and learning. Similarly, serious limitations in terms of adequate human resource exist at headquarter, regional field level. Another comparison with established provincial counter parts in Punjab and KPK reveals that following additional positions can be created by SFA to facilitate its operations. The roles of these nodes at food authorities are more focused and specialized in terms of operation and responsibilities and will be suitable for SFA to become fully operational and ready to take on the menace of food adulteration, misbranding and sub-standard food in Sindh province. These positions are enlisted below:

- a) Director Legal/Legal Advisors: Food Authorities have been found to deal with multiple court cases and lawsuits filed by FBO and consumers in terms of its operations, jurisdiction, standards, and domain issues due to inherent weaknesses and regulatory framework issues. While having dedicated legal advisor with specialized trainings in SFA would be helpful to reduce the burden of compliance.
- b) Food Authority School/Training Cell: Can play critical role to produce master trainers, design standardized curriculum, certification systems and develop training module for different industries. It can fulfill the mandatory food safety training gap for food handlers and can also generate funds for sustainable outcomes.
- c) Additional Director General (Headquarter): Can help for better coordination among regional offices.
- d) Director Public Relations/Media Cell: Can play an effective role for media sensitization about food safety issues, adulterations, guidelines and SOPs for food handling, nutrition sensitive approaches and role of gender and safe food for healthy population.
- e) Director Vigilance: keeping in view the rampant irregularities and malpractices a separate wing of vigilance to crackdown on spurious foods and malpractices would be very effective.
- f) Director I T& Monitoring: for smooth communication, data management systems.
- g) Director standards and accreditations to keep SFA abreast of current challenges and adopting new standards pertaining to local needs and as per scientific advice. This role would also make operations smooth by one position dedicated to update regulatory knowledge of operation teams.
- h) Director Capacity building position is recently established by Punjab food authority to build capacity of internal human resource.

Deficiencies in rules of business:

Below mentioned enforcement regulations/ standard operating procedures and guidelines will service as basic enforcement and implementation mechanism for Sindh Food Authority. These documents are not only a legal requirement for food authority to legitimize field operations but also serve as benchmark for food business operators to understand their rights and obligations.

1. Delegation of powers to Director General Food authority.
2. Appeal Regulations
3. Discard and disposal of unsafe food regulations
4. Service Rules for SFA staff.
5. Food recall procedures regulations
6. Implementation and enforcement regulations
7. Improvement notices, prohibition order and emergency prohibition order regulations
8. Product registration and display of logo regulations
9. SOP for field visits
10. SOP for storage and display of foods

Deficiencies in Food Standards:

As discussed above, to achieve harmony of standards across provinces below mentioned food standards need to be drafted by Sindh Food Authority.

1. Waste cooking oil regulations
2. Infant formula marketing regulations
3. Minimal pasteurization law for milk sold in Sindh
4. School canteen regulations
5. Food Packaging materials regulations
6. Marketing of Infant food regulations

Regulatory conformity Assessment of SFA

Pakistan standards and quality control authority (PSQCA), a federal body that previously had the mandate to formulate food standards before devolution of powers to provinces in 2010. However, after 2010 through 18th amendment provinces were given the mandate to regulate food as provincial subject. Due to this power devolution structure provinces enacted food authorities and started formulating separate food standards and regulations at provincial level. This in turn led to variation among provincial standards and guidelines creating more confusion and difficulties in terms of compliance and operations due to duplication of registration and licensing work and in many cases contradictory labelling requirements or food

standards. These issues were profoundly felt by food business operators working and operating at interprovincial or international level.

Due to such concerns raised by food industry federal government in a recent decision through council of common interest meeting directed provincial governments to develop single food standards for harmony across provinces. A detailed review of existing standards and variation of these standards among provinces revealed that there are approximately 582 food commodity standards defined by different food authorities in Pakistan. A preliminary analysis suggests there are only 343 out of total 582 commodity standards that exist at federal level. Yet, again the existing national standards have major variation in comparison to with provincial food standards. However, with new directions from Government to harmonize food standards in country, a new uphill task is ahead to formulate uniform national food safety standards throughout Pakistan.

Since Punjab province established its first food authority in country it took the leadership role and devised extensive regulatory framework aligned with international best practices and local conditions. These regulations (Punjab Pure Food Regulations 2018) were adopted by AJK food authority, Balochistan and KPK with modifications as per their provincial requirements. Sindh Food Authority regulations adopted standards from Punjab and PSQCA where existing food standards were defined by PSQCA. Due to these factors, interprovincial variations in food standards, SOPs and rules of business exist. Furthermore, streamlining the unified food standards, rules of business and operational regulations within provinces and federal authorities need a very systematic and detailed review and a coordination among provinces for mutually acceptable unified standards keeping in mind the unique requirement of provinces, national and international obligations in terms of food commodity standards.

In additions to existing food standards at various national and sub-national levels, food quality, animal and plant health conformity requirements are inconsistent for trade and export sectors in Sindh. These sectors are being regulated by authorities with entirely separate controls and different standards not consistent in many cases and sometimes even divergent. Since food safety is a broader domain and it needs a holistic approach often termed as “form to fork” entails that complete food supply chain should be regulated and be consistent in terms of food safety hazard reductions. However, this overall system is very fragmented in Sindh due to involvement of multi-agency controls and inconsistent regulatory framework. These factors are responsible for inherent weakness in the food control system and concentrated efforts are required for multi-agency cooperation and review of regulations and standards across multiple institution such as agriculture, livestock, quarantine, local government, municipalities, public health engineering, health, ministries of industries & commerce, science and technology, consumers, customs, SPS, food security, academic institutions and consumers and food business operators.

Coherence with International Standards:

Although the SFA regulations for food establishment have been drafted predominantly by adoption from international regulatory bodies such as codex guidelines, and some other countries such as India, Australia, USA etc. There are a lot of inherent weaknesses in these

regulations and it also needs a thorough review of regulations keeping in mind local needs and global requirements. For example, yet these regulations are extremely weak in the context of product recall and traceability mechanism. In addition to a potential risk of food hazards, labeling of food products should be according to EU and Codex standards and a separate section should be assigned for novel and GMO foods. Also, HACCP implementation should be ensured along with stringent guidelines for import/export foods, special consideration towards zoonotic diseases and pest management should be detailed extensively. Similarly, health claim regulations are recommended to be formulated and implemented to avoid misinformation and food fraud.

Chapter 5: Recommendations

Food safety and SPS compliance in Pakistan has been recently highlighted and there is a lot of capacity building requirements that need to be addressed. It is pertinent to mention that this chapter highlights numerous capacity gaps among food authorities in general and suggestions are made for improvements based on technical inputs by consultant, benchmarking regional and international best practices and keeping in mind the local food safety challenges. Food authorities in general are constrained by availability of human resource, finances, and infrastructure and above all very serious food safety challenges, rampant adulteration practices across the board. These institutions are challenged to provide safe food, whereas provision of safe food is multifaceted and needs to focus on many dimensions whether social, institutional, regulatory, supply chain, awareness, or advocacy and above all highly technical requirements. Due to this complex nature of food safety problem food authorities need tremendous focus on its mandate and support from all stakeholders for its capacity building.

In many of highlighted areas, none of food authorities can enhance internal capacity due to the specialized nature of those challenges and technical assistance is only way forward for these newly established food authorities in Pakistan. Food authorities have been supported by many international donors, national governments for technical assistance in those areas and there are lot of new technical assistance areas highlighted in this chapter for further technical assistance and support to food authorities.

Technical capacity Building:

Food safety and SPS compliance with food standards is a highly technical subject and requires technical capabilities and diverse skill set. Whereas establishment of food authorities is a very recent development in Pakistan the challenges related to food safety are enormous. These new institutions with limited capacities are formulating new food standards and rules of business to start their operations, mostly aligned with international standards for easier adoption. It is pertinent to mention that Food safety related issues are unique to this region and these issues had been ignored since decades. For example, awareness of FBO about food safety, applicable food standards and even rules of business is a challenge because of slow adoption and weaker advocacy strategies for newly established food authorities. Similarly, adulteration of food commodities, contamination issues, misbranding, food fraud and non-compliance with standards particularly for small, medium, or unorganized food sector are commonplace. Keeping in view all these facts in mind it is obvious to understand that challenges for newly established regulatory bodies are of massive scale.

Technical skills gaps are present in food authorities in following areas:

1. Food safety awareness of real issues and constant update about new emerging adulterants and malpractices is a challenge at national level. Even at universities, food safety research has been overlooked since inception of Pakistan. Due to establishment of new food authorities, their operations have exposed the gravity of food safety situation in country. Food safety recently gained some interest yet there are few organizations working on local food safety challenges. Punjab food authority sets a good

example to have separate research and development budget for local food safety related research and data collection to improve regulatory standards in accordance with evidence generated. Newly established food authorities in general have fresh graduate inducted as food safety officers with limited specialization and exposure to food safety issues. This problem can be ameliorated by involvement of academic and technical experts in scientific panel and better collaboration with local universities for evidence generation in emerging issues.

2. Awareness of local food safety and adulteration challenges, how to address those challenges and their implication is an evolving concern for food authorities. There should be a strong link with local R&D organization to update knowledge and field staff should be constantly educated about new issues through training and refresher courses. Involving resource persons and conducting focused seminars on specific issues related to food safety/nutrition is suggested for capacity enhancement in terms of awareness.
3. Ability to set up fully functional and fit for purpose food control laboratories is yet another challenge for food authority to have a dedicated building, layouts, scope of lab testing, equipment, and instrumentation. Third party support is highly recommended for these specialized tasks because of a general lack of expertise in government sector, particularly in this sector.
4. Similarly, apart from establishing food control laboratories, management of such food control labs in terms of record keeping confidentiality measures for the sake of transparency and fairness. Training should be conducted by third party at local or international level and exposure visits for technical wing can equip them with such skills.
5. Specialized trainings for food safety officers and food analysts should be designed and delivered on food sampling with focus on legal requirements as per food regulations, labelling, transportation and handling of food samples, record keeping, and sampling gears required for different food commodities.
6. Since food analysis is a very challenging and highly specialized field, coupled with the fact that there are huge number of analytical tests involved and they have a legal binding on food authorities it is recommended that capacity building in terms of analytical skills of running food analysis equipment will be required at later stages once equipment is procured.
7. Development of standard analytical methods and protocols is a critical step for any food control laboratory in terms of quality control, ease of operations, smooth management, legal compliance, and fairness principles. It is recommended that SFA technical wing should establish its standard operating procedures and it should be disseminated not internally but externally as well.
8. Development of manuals for standard methods of analysis would be highly useful to avoid duplication of efforts, training of new staff and consistency of analytical outcomes. Such manuals not only would be applicable for food authority internal working, but external third-party laboratories should follow these standard procedures to avoid errors and variations in outcomes.
9. Reporting and interpretation of sample analysis needs to have uniformity across all labs within province and across country to have transparency and fairness in operations.

This would be possible by a review of current practices and update of these procedures based on review outcomes.

10. Quality systems such as Good laboratory practices (GLP), ISO 17025 awareness and implementation and accreditation with international bodies would be very useful once the food control laboratories are established by SFA.

Operational Capacity Building

Operation capacity for a food authority is linked with many factors such as.

1. Availability of human resources is vital for operation of food authority. Being recently established entity staff needs are unmet both in terms of operational staff and technical staff. SFA has yet to establish divisional headquarters along with complete infrastructure in terms of building, laboratories, and human resources. Unless SFA becomes fully functional across all provinces licensing of food premises, food product registration and compliance would remain a challenge.
2. Availability of standard operating procedures and rules of business needs to be further drafted in areas such as recall procedures, traceability mechanisms etc. Existing rules of business are not enough to realize the goal of safe food and there is need for review of these rules of business in terms of legal requirements, ease of doing business for FBO and harmonization of operations across country and for import and export of food commodities.
3. Availability of labs is one of the main hurdles for compliance. Though approved PC-1 of SFA is in a process to start the process of equipment procurement for a central lab for Karachi and Hyderabad offices and two mobile van labs for field testing of commodities such as milk, oil and water. However, existing infrastructure would not be enough for coverage in Sindh province and more laboratories in regional offices would be required.
4. Coordination mechanism within food authority, regional teams, headquarter, other sections of food authority can be further improved by having dedicated dashboards and provision of tablets where real time information can be processed regarding implementation and enforcement outcomes.
5. Advocacy strategies need to be drafted for SFA to foster coordination of SFA with allied departments and with other stakeholders such as consumer engagement, donor agencies, gender experts etc. to sensitize these stakeholders about new role and responsibilities of SFA and how participatory approach needs to be adopted for safe and nutritious food provision.
6. Trainings are needed for field officers in many aspects such as communication, skills and incident reporting particularly designed for food safety officers.
7. Commodity specific inspection trainings for food safety offices would be more effective, for example food safety officers trained with commodity specific inspection requirements such as meat, dairy, agriculture, oil and ghee, flour etc. can inspect relevant FBO for better transparency and to avoid lawsuits and appeals against food authority.

8. Interpretation of new food safety standards and regulations is often time variable due to multiple factors but most importantly on-job training for newly inducted food safety offices and other operational staff. There is need for uniform understanding in terms of interpretations of drafted standards. This can be achieved by rigorous on job training and refresher courses for food safety officers.
9. Food commodity survey and data collection ability of field staff to design effective interventions. Separate funds for research and data collection can be allocated because firsthand data collected from field is essential for setting standards based on regional requirements. For example, many local food products are not standardized in terms of safety and quality parameters e.g. milk in terms of microbial load, total fat and solid fat differ on regional and seasonal basis. Similarly, consumption pattern and consumer opinion surveys can also help draft relevant regulations.
10. Mechanism for incident reporting is very critical as it has been observed in many cases of food poisoning in country in general has not been properly handled due to overlapping areas of responsibility between local governments, law enforcement agencies, health department and food authorities. While with new food regime SFA has to play its proactive role with aggressive training and capacity building on incident reporting and complaint handling. This would establish trust in consumer's mind about protection of consumer rights by SFA and would lead towards a culture of reporting malpractices and unsafe food through active consumerism.
11. Complaint handling and investigation of food borne diseases, communicable diseases spread through food is very specialized area and this needs to be addressed in terms of training and formulations of regulations.

Regulatory Capacity Building:

Regulatory capacity building entails all the skills and capacities to be able to frame robust, holistic, realistic, and applicable food safety standards considering both regional needs and international standards. Whereas these skills are mostly acquired and come with practical exposure of subject matter and discipline knowledge and qualification. It is a slow process that can gradually improve with uplifting standards in food industry, awareness among consumers and learning curve from field operations. With regards to Pakistan food standards, this process remained at halt for around six decades after food standards framework of 1960s. After 2010 this process of having new food authorities started and first ever improvement came with Punjab Pure food regulations 2017 and later with next version of these regulations in 2018.

Capacity building issues related to framing regulatory mechanism can be improved by:

1. Having flexibility in rules of business to modify standards as and when needed based on new understanding of issues, new scientific knowledge, new food safety issues and challenges etc. These challenges can be met by involvement of all relevant stakeholder and scientific panel in decision making on case-to-case basis so that food standards and operational issues are resolved as soon as possible based on real learning of ground realities. This is evident by frequent updates of food regulations in regional food authorities

such as FSSAI and provincial level by Punjab Food Authority. It has been learnt that despite adopting international standards for majority of food commodities, food safety standards for local food products/practices are not promulgated. When food authorities started enforcing food regulations there came a steep learning curve with realization of local products/process issues and many food business operators' associations are getting heavily involved to get these regulations more realistic according to local situation and capacity issues of FBO.

2. Mechanisms to base new food safety standards on risk assessment basis is highly recommended. However, relevant capacity for risk assessment and institutionalization of risk assessment is never practiced because it involves multiple departments working coherently. Whereas food authorities in general addressed these issues as an institution in isolation, the impact of new food safety regimen has not realized its potential. Major reasons for this isolation is the institutional structure and mechanism of allied department is not autonomous, outdated regulations and poor capacity issues. A capacity assessment exercise for allied departments is need of time to uplift allied departments capacities in a coherent manner. SFA can initiate a detailed review of relevant regulations, standards and guidelines that are not aligned to food safety standards proposed by SFA and can share these guidelines to Government and relevant ministries to consider these inputs for a robust food control approach.
3. Understanding of regional and international food safety standards and best practices and following these practices are very important. Since Codex standards and international standards provide general guidelines and robust safety standards, local scenarios may be different and food regulations should be able to address local challenges. Some examples are SOPs for local food vendors, standards and food safety hazard of local cuisines, activities of unregulated food sector and miscreants, adulteration malpractices unique to this region need to be seriously addressed. These issues can be dealt with multipronged approaches but above all capacity building across SFA is vital and it should be institutionalized for rapid response to food safety issues.
4. Understanding of relevant regulations in country for farm to fork approach including agriculture, livestock, farming (dairy, poultry, meat), health and disease, epidemiology, nutrition, food analysis, post-harvest, primary and secondary industry etc. plays an important role. This can be achieved by developing advocacy strategy by food department and SFA to create awareness and identify gaps by thorough need analysis. However, an interdepartmental coordination mechanism would be required to be established by higher level administration. Unless autonomy and capacity building of allied department is built SFA efforts to improve overall food control system would not realize its full potential. Some of the areas that need to be aligned with SFA regulations for final consumer are pesticide rules, good agriculture practices, livestock disease surveillance and reporting, and mutual standard setting and collaboration on livestock commodity (meat, egg, milk, poultry etc.) standards of safety would make farm to fork approach work.
5. Harmonization of food safety standards at national and international level for ease of doing business is strongly felt by food business operating at national and international level. It is argued by food industry associations that they must comply with multiple standards/protocols due to variations in relevant food authority regulations. For example, there are varied labelling requirements, separate premises, and product registration

requirements as well as variation in safety and quality standards at interprovincial and intraprovincial level.

6. At food business handler level, it is equally important to educate food business operators about regulatory standards, their compliance, importance of these standards and capacity strengthening for compliance. This can be done by strengthening the public relations aspect of food authority for consumer level awareness through Sindh Food Authority training schools for local vendor level trainings.
7. Food Authority also needs to play role in creating awareness about nutrition sensitive approaches and role of food safety for food security by arranging media campaigns to involve public seminars, involving food ambassador programs at academic level as practiced by Punjab Food Authority and radio channels.

In summary, capacity building is required at various levels (individual, organization, and systems level) with respect to food safety and quality. Capacity building should initially involve system level efforts (which involves any revisions necessary in the policies and regulatory documents i.e. detailed guidelines to be provided regarding FBO, SOPs for food manufacturers, traceability frameworks, operational jurisdiction of SFA, regulations regarding food borne illnesses, GMOs and zoonotic diseases) then involve individual level efforts (for food producers, processors, distributors, consumers etc. on basic food safety and newly formulated food regulations and rules of business). After that the focus should be the organization level (i.e. SFA's operational staff, food enterprises, food inspectors, consumer groups and stakeholder groups) at first, the focus should be the capacity assessment of relevant stakeholders related to implementation of SPS, WTO measures in the province (i.e. Food, Livestock, Agriculture, Trade, Health etc.) to ensure strengthening of food authorities and uplifting the FBO status for export globally, another important aspect is to guide the staff of food control laboratories about food sampling, handling, and their analysis, furthermore, for the purpose of transparency, fairness and improvement of regulatory compliances lab manuals and SOPs should be drafted and shared with FBO and technical staff for ease of compliance. Similarly, implantation of quality management systems at SFA labs would be a way forward to create credibility of these reports generated by these labs and reduction in legal issues/court cases and law suits.

Training needs:

Systematic trainings can be conducted at all tiers of food authority. Some of the suggested training needs are mentioned below.

- a. Top Management level Trainings and exposure visits are highly relevant for newly established food authorities both at national and international level. These sorts of trainings and exposure visits are highly recommended for management and administration to equip them with the concept of national food control systems and how established food authorities function in other regions. Similarly, trainings on international obligations in wake of WTO, IPO, SPS measures and international obligations for food control are required. Nutrition sensitive approaches, international regulations, other regulations impacting food safety and international trade, effective communications and leadership are

some of the highlighted areas that can be considered while developing capacity building programs.

- b. For technical wings, trainings on below mentioned area are essential.
Food safety issues/inquiry of incidents, interpretation of regulations, food sampling, food handling, food analysis, training requirements for lab staff, interpretation of results, lab accreditations, analytical techniques,
- c. For operations department technical capacity building of MSME, making it use friendly, rating and appreciations for MSME, ease of doing business for MSME and involvement of industry and business associations to develop understanding of the local industry challenges and mitigating them would be useful.
- d. SPS capacity building needs to be given attention by interdepartmental workshops/training sessions for relevant stakeholders i.e. Agriculture, Livestock and Quarantine Departments.

However, it is equally emphasized that all above mentioned training needs can not be met by available human resource at departmental level and technical assistance in these areas would be required for a robust food control system. These weaknesses are systemic and have prevailed for a very long time, and to bring any positive change a clear focus on capacity building is vital.

Adopting National Food Control System approach:

With devolution of powers food, health, agriculture and livestock and all related departments have mandate to have their own set of standards and rules of business at provincial level. Establishment of food authorities at provincial level was a first step to establish independent food authorities. While adoption of new standards and rules of business and progress in food department was extraordinary as compared to other departments. Partly this can be attributed to autonomy and flexibility inherent in food authority acts for all of food authorities. Further improvement can be attributed to availability of funds and technical assistance provider support to food authorities.

However, this was contrary to other allied departments where no such reforms were observed, neither at standard setting level nor on implementation level. Whereas other allied department are crucial for food authorities to have a national food control system where safe food can be produced for in country consumption and export of food commodities to uplift the food security situation in country.

It is very evident that there is need for following actions to adopt a national food control system approach.

1. It is pertinent to mention that to bring order in this national food control system to uplift food safety standards and SPS measures major reforms are needed in every in allied departments that provide raw materials for food. Examples include agriculture, livestock, quarantine and plant health departments, seed certifications, health, veterinary health, primary industries etc. Food authorities in terms of mandate and scope cannot intervene

in other department`s jurisdiction despite they fall under farm to fork supply chain. Having weaker regulatory framework and technical capacity in these departments is a major hurdle to uplift food safety and quality standards not only for local market but also for export potential of local commodities as well.

2. Detailed review of relevant legislations is needed for these departments as well, it is observed that these departments have multiple standards, overlapping with other jurisdictions, national and international regulations and within departments as well. Some of the examples of regulations directly linked with food authorities are agriculture marketing, poultry acts, livestock regulations, pesticide regulations, fertilizer acts, quarantine regulations etc. After devolution of powers through 18th amendment provinces can formulate standards in these domains but there is state of confusion in many food safety related standards. For example, import regulations enforced at customs is under domain of Ministry of Commerce at federal level through its import policy order 2020. Whereas provincial food safety regulations define import with regards to its provincial jurisdictions and demand imported products to meet provincial food standards and labelling requirements. Similarly, pesticide regulations and its area of responsibility with national or provincial regulators is not clear (<https://tribune.com.pk/story/2113683/federal-provincial-bodies-lock-horns-pesticide-laws>) . This is evident by fact that Punjab enacted its Punjab Agricultural Pesticides Act 2012 and the Punjab Agricultural Pesticides Rules 2018 whereas Pakistan agricultural pesticide ordinance 1971 and later 1973 is applicable in other provinces. MRL values for these pesticides in food products are defined by food authority regulations but no implementation mechanism exists for implementation due to clarity in terms of area of responsibility within departments.
3. Moreover, role of PSQCA as national standardization body and its implementation for import regulations by federal government is overlapping with provincial standards and autonomy. Similarly, reuse of vegetable oil and rendered animal oil has been practiced for human consumption routinely across Pakistan. To discourage this menace different provinces formulated standards to ban use of rendered fats and used oils, however poultry feed regulations allow use of rendered fats for feed purposes. It is worth mentioning that there are multiple examples of these overlapping/grey areas and it demands a comprehensive review and comparisons among different regulatory standards within departments and across departments at all levels i.e. local, provincial and where possible national and international level harmonization is needed.
4. After having uniformed standards within provinces, the next challenge is to streamline food safety compliance and transparency, there is need to establish rules of business for each department that should be in harmony with these regulations and standards.
5. Governance mechanism is direly needed with different departments as there are overlapping in terms of areas of responsibility within department and duplication of efforts leads to wastage of resources and badly impacts ease of doing business. For example, in case of meat processing slaughterhouses and chicken meat shops are regulated by livestock department or local government in many cases safety of these commodities is compromised. This is also applicable to quarantine inspection of food commodities by quarantine department, inspection of food commodities at customs department by ministry of commerce, pesticide residues in food commodities by pesticide labs working under agriculture department, drug residues and zoonotic diseases in meat and dairy by

livestock department are few examples. Similarly, Agriculture, storage practices, communicable and zoonotic diseases are some more examples where area of responsibility is not clearly defined in terms of regulation. Due to these factors, food authority cannot intervene or take punitive measures in many such cases to streamline the food safety regime.

Review of allied regulations and departments

Keeping in view the multi stakeholder involvement in the food safety and quality domain, it is crucial for any food authority to have strong communication to guide other stakeholders about their role and responsibilities in food safety. This can be achieved by

1. Communication with industry, academia, chambers, associations, education institutions, food department, gender experts, community level organizations, training institutions etc. and other line departments- Agriculture/Livestock/ Trade/Public Health and Local Government departments through seminars, workshops and training sessions.
2. Involving quarantine, agriculture, trade and livestock experts in the scientific panels of SFA they should be given representation in the scientific panel to get their feedback and sensitize them at the same time.
3. An IT wing to support communications among SFA departments is highly relevant as established by other effective FAs such as Punjab and KPK food authorities. A dashboard for effective coordination among food staff and top management would be an effective tool for real time updates and action by food authority staff would streamline the overall performance of SFA.
4. Medical screening and food safety training certifications and license updates, fines and penalties can be interlinked on such dashboards for effective management.
5. Food authorities are resource scarce and poorly funded. To make their operations more sustainable, business models needs to be devised for funds generations and management. Initially striving for bilateral donor funded projects (FAO and or OIE) for ensuring food safety, animal, and plant health control is one immediate way forward to deal with short term financial shortcomings. However, in long term sustainability can be achieved through generation of revenues through registration, licensing, trainings, education and promoting best performing FBOs.
6. Removing bottlenecks for exports i.e. (solving SPS capacity gaps for improving market access) by reducing the risk of pests, diseases, and health burden through collaboration with Health, Quarantine, Livestock and Agriculture Departments would make it easy for MSME to be able to export agriculture and food commodities and generate revenues.

Consumer Awareness and Advocacy:

Consumer of food plays very critical role in the whole eco-system and it is equally pertinent for all government departments to serve the end user in amicable way. There is an apparent disconnect between food authorities and consumers. Food authorities should have a mechanism to educate and raise awareness about food safety issues, consumer rights, complaint mechanisms, nutrition and health, hygiene and sanitation and compliance reports

of various food industries. Similarly, at organization level food authority should have a communication strategy to gain more acceptance from stakeholders including industry and consumers. Since food safety regime is relatively recent in Pakistan, it is important to make comprehensible food regulations for small business in the form of easily understandable requirements for commodity specific vendors including registration, licensing, standards, enforcement, and complaint redresses etc. IT based dashboard and consumer friendly mobile apps can be useful tool for consumer awareness and capacity building of small business owners.

Gender Integration:

It should be ensured that equal opportunities for both genders are provided at every level in employment, decision making, growth and inclusion at Sindh Food Authority and business sector and at consumer level. This can be ensured through gender participations in all these technical, policy and management level meetings and decision-making process. Keeping in view the food insecurity and its profound impact on women nutritional status and health, nutrition sensitive approaches needs to be promoted by SFA through its media and public awareness campaigns. The role of food authorities through social media and print and electronic media has been profound and it played a key role in sensitization about food safety and nutrition.

Other Considerations:

1. Licensing of new food business is a huge task keeping in mind the huge number of business operators in different sectors and limited number of field staff available with SFA. There is a need for stronger licensing mechanism with embedded IT systems to help ensuring implementation of enforcement tools such as prohibition orders, improvement notices or food recalls.
2. Moreover, product registration needs a lot of dedicated work to register each product and assuring compliance such as composition, label, categorization of product as per SFA food regulations. Product registration needs provision of technical report before approval by SFA. product registration wing can be helpful for better coverage and thus compliance with standards.
3. Food handlers of food businesses need to be trained on food safety and hygiene as it is mandatory requirement through these regulations to grant a license to FBO. However, limited capacity to train huge number of food handlers in organized and less organized sectors is a challenge. This can be addressed by developing online modules/interventions/trainings and record keeping systems for such food handlers.
4. Inspection SOPs should be different for each province depending upon types of industries and status of industries in each province. In general, for organized food sector these SOPs can be in harmony with globally followed SOPs. However, for street vendors/less organized sector/cottage industries and small-scale eateries these SOPs should be drafted as per local conditions.

5. Auditing standards for food product registration and food premises licensing are variable across provincial authorities. SFA proposed regulations have a separate section for regulations for food establishment unlike other provincial authorities where SOPs specific to food premises at par with local conditions are mentioned.
6. Food safety level-1,2 and 3 trainings should be organized and recorded to ensure harmonization of knowledge on provincial level.
7. Campaigns should be run to make the public and food businesses aware about hazards of food adulteration and its impact on quality of life.
8. Nutritional labelling and regulations on health claims should be ensured on all food products registered under SFA
9. Food poisoning cases in interior Sindh need to be given attention for ensuring public health and these should be used as case studies to ensure restricting such cases and eradication of their root causes.
10. Water is major cause of food borne disease and there are multiple departments that are involved in provision of drinking water. It is mainly provided by municipal corporations, local government councils and public health engineering departments. Although, food authority has set of standards for drinking water, it is needed to communicate these standards to mentioned departments and work closely with these departments to provided safe drinking water to public.
11. It was mentioned by representative livestock department that issue of halal meat especially beef and mutton is a serious concern, and it should be addressed both at regulatory and operational level by close collaboration, review of legal framework and communication and capacity building of these departments.

Chapter 6: 5-YEAR ACTION PLAN Sindh Food Authority

Purpose:

The purpose of this consultancy is to conduct a comprehensive institutional capacity assessment of the SFA to identify the areas and activities in which there is a demand for technical assistance and to develop a plan for the strengthening of the FA according to the needs and aspirations of stakeholders and best international practices.

Directions:

1. This work plan will serve as a bench mark for next 5 year activities
2. Distribution of work plan copies among FA personnel and stakeholders would be necessary to keep track of the progress, along with awareness about risks of potential barriers in progress and mitigation strategies.
3. Keep copies handy to bring to meetings to review and update regularly. Work plan can be reformed according to the situations (especially during COVID era)
4. Coordination of SFA with different departments i.e. Agriculture, Livestock, Trade, Health for ensuring SPS compliance (Sanitary and Phyto-sanitary)/WTO (World Trade Organization), Quarantine, Industry and Consumers to ensure harmonization for strengthening of SFA's regulatory writ

Expected Results/Accomplishments:

1. Coordination among stakeholders is an important step in this 5 year action plan to clear out any exiting loopholes in Sindh food safety management systems
2. Strengthening of SFA by ensuring the implementation of food safety and hygiene at all levels
3. Adaptation of globally accepted best practices by both food handlers and food regulators
4. Submission of PC1 of food laboratories (central/mobile) for their approval and to make them operational as per international standards
5. Capacity building at individual, organization and framework level
6. Development of an organized food safety system with globally accepted functional components

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| <p>Action Step-1 Engagement of Stakeholders</p> | <p>Engagement of stakeholders (i.e. Food, Agriculture, Extension, Trade, Finance, Planning and Development, Public health, Livestock, Industry representatives and Local Government for collaborative efforts towards uplifting food safety in Sindh (i.e. DG of SFA support and leadership would play a vital role and overall support.</p> <p>Technical Department SFA will be helpful in developing mechanism for food regulation formulation/amendments/ knowledge of food recall systems/incident reporting/certification of labs etc.,</p> <p>Operations Department of SFA will clarify the field work operation dynamics and its loopholes/field work regulations/monitory and compliance/inspection and reporting mechanisms,</p> <p>Administration Department can help in understanding strengthens and weakness of SFA' HR,</p> <p>While a comprehensive coordination mechanism will be developed with individual departments overseeing activities of relevant products i.e. crops, meat, oil milk, and water etc.) Additionally, collaboration with relevant stakeholders not only for their capacity assessment to identify bottlenecks but also it is a need of the hour to ensure implementation of internationally recognized SPS measures to empower FBOs so they can expand their business and export globally</p> |
| <p>Action Step -2 Formulation of regulations</p> | <p>Formulation/approval of comprehensive rules of business and Implementation/enforcement tools. Some of highlighted areas may include but not limited to</p> <ol style="list-style-type: none"> a. Delegation of powers to Director General Food authority. b. Appeal Regulations c. Discard and disposal of unsafe food regulations d. Food Packaging materials regulations e. Food recall procedures regulations f. Implementation and enforcement regulations g. Improvement notices, prohibition order and emergency prohibition order regulations h. Marketing of Infant food regulations i. Product registration and display of SFA logo regulations j. SOP for field visits k. SOP for storage and display of foods l. Waste cooking oil regulations m. Infant formula marketing regulations n. Minimal pasteurization law for milk sold in Sindh o. School canteen regulations |
| <p>Action Step-3 Harmonization of Standard</p> | <p>Harmonization of standards is needed at three tiers.</p> <ol style="list-style-type: none"> 1. At provincial level: comprehensive review and comparison is required to harmonize standards across provinces and to reduce variation among standards and rules of business to facilitate FBO. 2. At national level: Harmonization of standards and rules of business mutually agreed by all provinces to be set as national standards as directed by national government and implementation/enforcement mechanism devised for provincial level. 3. At International level: Comprehensive review is needed to harmonize with international standards where possible and to include more areas under |

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| | <p>food regulations previously not included for example, organic foods, genetically modified foods and health claim regulations to name a few.</p> |
| <p>Action Steps-4 Infrastructure/Lab</p> | <p>Development of PC-1 proposal for food labs and mobile van labs for provincial coverage (especially considering the budget by looking at the cost of various expendable supplies and equipment and choosing only those with relevant specification) to start operational work of labs.</p> <p>Suitable infrastructure/layout for food control labs depending upon nature of food analysis.</p> <p>Guidelines for quality systems and accreditation of these labs.</p> <p>Mechanism and guidelines/protocols for food analysis through subsidiary third party private/government labs.</p> |
| <p>Action Steps INSPECTION SERVICES</p> | <p>a. How to prevent food adulteration? Consequences of substandard food consumption</p> <p>b. Awareness campaign for food business to train their food handlers on food safety</p> <p>A campaign should be run to guide general public and food businesses about food adulteration and how it's an unethical practice, furthermore, an online monthly magazine /social media strategy should be developed by food department for sharing information and important achievements of SFA.</p> <p>Development of robust reporting system for public in case of outbreak, non-compliance, food safety incident</p> <p>Development of mock/friendly audit systems to familiarize FBO about new food safety regime and protocols.</p> <p>Human resource development for food safety officers with commodity specific training for inspection</p> <p>Training/refresher courses/on-job training for food safety officers about interpretation of regulations and how to conduct food safety audits.</p> |
| <p>Action Steps-1 IT Dashboards and applications</p> | <p>Development of a comprehensive dashboard with real time updated information. User friendly applications with commodity specific compliance education details.</p> <p>Licensing mechanism needs to be improved along with product registration and specific guidelines to be established for medical checkup of food handlers from certified doctor</p> |
| <p>Action Steps Advocacy Strategy</p> | <p>Capacity building in terms export/import related food regulations, rules of business and development of a sound advocacy strategy for harmonization between other departments where area of responsibility overlaps and coordination would yield better compliance to SPS both at provincial and national level.</p> |
| <p>Action Steps Capacity Building Food Safety</p> | <p>Food safety curriculum to be developed and specialized courses to be introduced separately and into the curriculum of degrees by collaborating with universities</p> |
| <p>Action Steps</p> | <p>Food sampling, safety trainings needs to be conducted along with food hygiene and handling through 3rd parties for ensuring capacity building of food handlers and food regulators</p> |

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| FBO Capacity Strengthening | Commodity specific trainings for MSME for basics of food safety, food operations and compliance. |
| Action Step Institutional Structure | <p>Governance and Institutional structure issues should be addressed in terms of shortage of HR and inclusion of new roles as practices within country such as legal advisors, vigilance, and public relation departments.</p> <p>Development and strengthening of internal R&D and data collection/research capability for local food safety issues in data scarce areas for effective regulatory and compliance coverage.</p> <p>Development and strengthening of SFA School for training purposes/sustainability models.</p> |
| Action Steps TRAINING COMPONENTS | <p>Training sessions to be organized for different sections of SFA</p> <ol style="list-style-type: none"> 1. Top Management: Managing Food authorities, food control systems, exposure visits, compliance, WTO, SPS etc. 2. Technical management: on basic food safety & hygiene, food handling, sampling, analysis, HACCP, and regulatory affairs) should be conducted for food handlers of food businesses with dairy, spice, oil, water and meat being priority areas. 3. Furthermore, stakeholders i.e. PSQCA, Livestock, Agriculture, local Government, Food, WTO, SPS and Quarantine Departments should be involved to ensure harmonization and to make collaborative efforts fruitful especially in terms of regulations and training of staff on relevant aspects 4. Operation management staff can be inducted into training areas such as ease of doing business for MSME, leadership and communication skills, community engagement and development. 5. Similarly, incident reporting, risk assessment or global food systems and regulation awareness trainings can be conducted to technical resource persons/scientific panel. |

Evidence of Success

- a. Positive feedback from stakeholders
- b. Information dissemination among all the components throughout the chain
- c. Checklist of plan of action every month
- d. Physical realization of PC-I draft in the form of functional Food Quality Control lab/Mobile Lab.
- e. Capacity built at individual/organization/framework level
- f. Improving regulatory and food safety situation in Sindh

Evaluation Process:

- i) Evaluation through 3rd party auditors
- ii) Evaluation by means of internationally recognized bodies.

ANNEX-1 COMPOSITION OF SCIENTIFIC PANEL FOR SINDH FOOD AUTHORITY

With the approval of the Board of Sindh Food Authority and in pursuance of section 14 (1) of Sindh Food Authority act 2016, a scientific panel was constituted on the recommendation of selection committee.

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| Mr. Abrar Ahmed Sheikh (Director Operation) | Convener |
| Dr. Syed Muhammad Ghufan Saeed (Phd Food Technology) | Member |
| Dr. Omar Mukhtar Tarar (Phd) | Member |
| Dr. Fayyaz Ashraf (Post Doc.) | Member |
| Mr. Muhammad Najeeb Khan (Specialization in Islamic Jurisprudence) | Member |
| Dr. Sagheer Ahmed Sheikh (Phd) | Member |
| Dr. Ahsanullah Khan Bhrgri (M.B.B.S MSC. Public Health) | Member |
| Mr. Allah Ditta Jarwar (Phd) | Member |
| Mr. Shafique Rehman (MSC. Horticulture) | Co-opt Member |
| Mr. Anees Qureshi (MSC. Food Technology) | Co-opt Member |

ANNEX - 2 LIST OF CONSULTED STAKEHOLDERS:

1. Sindh Food Authority
2. Pakistan Association of Food Industries
3. Consumer Association
4. PSQCA Representatives
5. Agriculture Department
6. Livestock Department
7. Agriculture Extension Department
8. Plant Protection
9. Local Government
10. Member Scientific Panel SFA
11. Local Government Representatives

ANNEX - 3 IMPROVEMENT NOTICE BY SFA



SINDH FOOD AUTHORITY GOVERNMENT OF SINDH



No. D.G/DIR (OPR)/SFA/5-84/2019 Karachi
Dated: 16th April, 2019

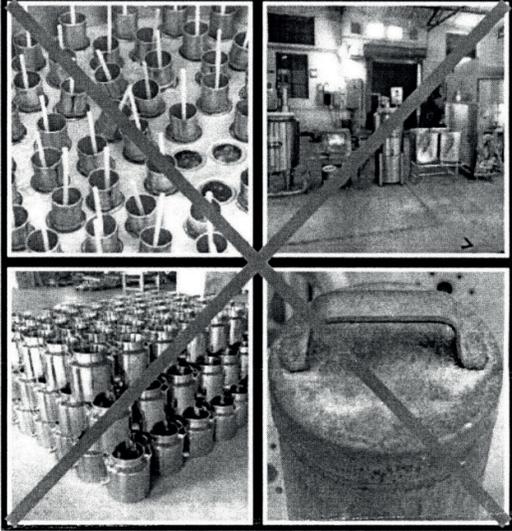
NOTIFICATION

Pursuant to the power conferred upon me under section (22) of Sindh Food Authority Act, 2016 and consequent upon the Public health hazard report submitted by the Public Analyst of Sindh Food Authority, I being, the competent Authority hereby promulgate emergency prohibition orders on the storage and transportation of frozen milk processed in ice factories till further orders on the following grounds:

Public health risk associated with raw milk freeze in Ice Factories:

1. Mild Steel (MS) containers create rust that is food safety risk.
2. MS containers cannot be cleansed easily due to rough internal body. It is a main source of microorganism (biological hazard).
3. Freeze milk blocks are handled on unhygienic floors of ice factory, (biological hazard).
4. Sometimes milk is turned into ice and kept for days. (both chemical as well as biological hazard).
5. Milk during storage must be protected from external contamination.

This order is in field from the date of issuance of this Notification.



(DIRECTOR GENERAL) SINDH FOOD AUTHORITY

INF/KRY-No. 2456/2019

ہم دستگیر دی کے خلاف متحد ہیں۔

ہم دستگیر دی کے خلاف متحد ہیں۔



پر بس ہم ایس کریں۔

Say No to Corruption

ANNEX – 4 SFA-CENTRALIZED FOOD TESTING LABORATORY

The following is the summary of essential Lab requirements, providing Testing facilities in Central Food Testing Laboratory SFA, this provide initial framework which may be vary subject to the actual facility proposed according to industrial and market requirements.

Nature of Testing Laboratories

1. Oil & Fat Testing Lab
2. Water Testing Lab
3. Beverages & Juices Testing Lab
4. Dairy & Dairy Products (Testing Lab
5. Sugar Lab/Raw Material Lab
6. Chocolate & Confectionary Lab
7. Meat Testing Lab
8. Cereal Testing Lab
9. Food Testing Lab (Ketchup, Sauces, Mayonnaise, Spices & Condiments)
10. Sweets & Bakery Items testing Lab
11. Alcohol beverages testing Lab

ANNEX – 5 LABORATORY EQUIPMENT PROCUREMENTS:

List of some major equipment with their purpose for Food Testing with Chemical and Biological Technologies;

| S. No | Name of Equipment | Qty | Remarks |
|--------------|---|------------|------------------------------|
| 1 | Incubator 35c – 44.5c | 04/Lab | Different Temperature Ranges |
| 2 | Cool Incubator | 02 /Lab | |
| 3 | Autoclave | 02/ Lab | |
| 4 | Microscope | 01/ Lab | |
| 5 | Colony Counter | 01/ Lab | |
| 6 | Laminar flow hood | 04/ Lab | |
| 7 | Vortex mixer | 02/ Lab | |
| 8 | Stomacher | 01/ Lab | |
| 9 | Filtration assembly with pumps | 02/ Lab | |
| 10 | Hot air Oven | 02 | |
| 11 | Incubator 35c – 44.5c | 04 | |
| 12 | Calibrated Thermometer with different ranges | 06/labs | |
| 13 | Gas Chromatography | 01/ Lab | |
| 14 | High Pressure Liquid Chromatography | 01/ Lab | |
| 15 | FTIR | 01/ Lab | |
| 16 | UV-Spectrophotometer | 02/ Lab | |
| 17 | Enzyme –linked products immunosorbent assay (ELISA) | 01/ Lab | |

Annex – 6 SFA-Future Plan for Instrumentation procurement

1. Gas Chromatography Mass Spectrometry (GC/MS)
2. LC/MS
3. FTIR :- *E.g. Lard detection in cake, biscuits, chocolate, edible oil and meat, Supplement adulteration, enzymes.*
4. Mass Code PCR/ Thermal Cyclers *E.g. Speciation of fish, rice, meat and wheat*
5. Differential Scanning calorimetry (DSC) *E.g. Ghee, butter, lards shortening*
6. DNA-Analyzer/ Genetic Analyzer *E.g. Meat, Pig meat contamination*
7. Electronic nose (EN) :- *Lard detection in edible oil*
8. ICP/MS

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