

International Technical and Quality Requirements; Challenges for Myanmar

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Quality Requirement for Target Market



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Technical Requirement

- Mandatory Requirement
 - Technical Regulation
 - Phyto Sanitary Requirement
- Trading Requirement
 - Public Standards
 - Organization Standards
 - Buyer Requirements
- To approve the requirements
 - Variety of Certificate (Testing, Analysis, Inspection, Auditing)



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Market Technical Requirement

Pesticide Residue

- (Imidacloprid, Cabaryl, DDT, ---)

Micotoxins

- (Aflatoxin, B1, B2 --)

Quality Standards

- (RAC, AV, ----)

Food Additives

- (color, flavouring, ----)

Certificates

- (GAP, GHP, HACCP, Food Safety Management System ISO 22000,---)



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Links for Taiwan Technical Requirements

- MRLs Link ပိုးသတ်ဆေးကြွင်း
- <https://consumer.fda.gov.tw/Law/Detail.aspx?nodeID=518&lang=1&lawid=127>
- Heavy Metal Link- Cadmium (0.2 ppm) and Lead (0.2ppm) ; Wet weight basic အဆိပ်သင့်သတ္တု
- <http://law.moj.gov.tw/Eng/LawClass/LawAll.aspx?PCode=L0040093>
- Micotoxin Link- Aflatoxin Peanut (15 ppb); Nuts (10 ppb); Edible oils and fats (10 ppb) မှိုဆိပ်
- <https://consumer.fda.gov.tw/Law/Detail.aspx?nodeID=518&lang=1&lawid=129>
- Health Food Control Act Link ကျန်းမာရေးအစားအစာထိန်းချုပ်ရေးဥပဒေ
- <https://consumer.fda.gov.tw/Law/Detail.aspx?nodeID=518&lang=1&lawid=167&k=%25u5065%25u5EB7%25u98DF%25u54C1%25u7>
- Act Governing Food Safety and Sanitation Link အစားအစာဘေးကင်းရေးနှင့်သန့်ရှင်းရေးဥပဒေ
- <http://law.moj.gov.tw/Eng/LawClass/LawAll.aspx?PCode=L0040001>

Study of 100-Latest Alerts of EU RASFF for oilseeds Sesame, Groundnut, Sunflower Grain and Oils

- Link
- <https://webgate.ec.europa.eu/rasff-window/portal/?event=SearchForm&cleanSearch=1>

EU Food Law

Sesame (Latest 100 notifications)

Hazard Subject	No. of notifications	Origin	Category	Risk Decision	Action
Salmonella – 22- species	94	India, Nicaragua, Nigeria , Bolivia, Netherlands, Senegal	pathogenic micro-organisms	Serious	border rejection
Aflatoxins	2	Nigeria, India	Micotoxins	serious	Recall from consumer
Rodent excrements	1	Sudan	Foreign bodies	not serious	Border rejection
Live insects	1	India	Foreign bodies	not serious	Withdraw from market
Poor hygiene infested with larvae of insects	1	Nigeria	Foreign bodies	Not serious	Re-dispatch
Dead insects excrements of insects	1	India	Foreign bodies	Not serious	Border rejection

EU Food Law

Groundnut (100 Latest notifications)

Hazard Subject	No. of notification	Countries	Category	Risk Decision	Action
Aflatoxins B1: total (ppb)	90	India, Brazil, China, Gambia , Egypt, Ghana, Madagascar, Bolivia, Argentina, United State	Micotoxins	Serious	border rejection
Fraudulent Health Certificate	6	China	Adulteration/ fraud	not serious	Border rejection
Absence of Health certificate	4	India, Ghana	Adulteration/ fraud	not serious	Border rejection

EU Food Law

Sunflower seeds (52 Latest notifications)

Hazard Subject	Origin
Afltoxins ; B1; total (ppb) (Micotoxin) Serious	France, Egypt, Israel, Germany, Argentina, US
Too high content of ragweed (ppm) Serious	Hungary, Germany, Turkey
Abnormal smell seeds infested with insects , not serious	Ukraine
Too high content of thron-apple (ppm)	
Malathion (ppm)	Ukraine
Faeces of rodents and insects	
Unsuitable Organoleptic characteristics infested with insects	Moldova, China

EU Food Law

Sunflower seeds (52 Latest notifications)

Hazard Subject	Origin
Dead insects and faeces of rodent	
Dioxins(Industrial contaminants)	Italy
Gamma-HCH(Pesticide residue)	Moldova
Lindane	Argentina
Sweetener E 950-acesulfame Sweetener E 954 saccharin in roasted and salted sunflower(Food additives & flavour)	China
Infested with moulds	China
Salmonella	China
Stone infested with moulds (2)	China

EU Food Law

Fats and Oils (50 Latest notifications)

Hazard Subject	No. of notification	Countries	Category	Risk Decision	Action
Unauthorized color in palm oil	13	Ghana	Composition	Serious	Recall from
benzo (a) pyrene in Sunflower oil	18	Ukraine, Malaysia, China, India, Netherlands	Industrial contaminant		Use for other purpose than food/feed
Too High erucic acid in blended mustard oil	4	Germany, Bangladesh	composition	Not serious	Detained by operator
Biphenyl	1	Turkey	Pesticide Residue	Undecided	Place under custom seal
Aflatoxin in peanut butter	1	Philippines	Mycotoxin	serious	Import not authorized
Polycyclic aromatic hydrocarbon	2	Ukraine	Industrial contaminant	serious	Border rejection
Document and certificate	2	Japan, Ukraine	adulteration, Fraud	Not serious	No dispatch
Fats from animal	9	-	-	-	-

Regulatory and Voluntary Requirements

- Codex Alimentarius Guideline and Standards
- GAP (Good Agricultural Practice)
- HACCP (Hazard Analysis Critical Control Point)
- ISO 9000 (Quality Management System) ISO 14000 (Environmental Management System)
- ISO 22000 (Food Safety Management System)
- ISO 26000 (Social Responsibility Standard)



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Guidelines for regulators for regulating in Edible oils

- CODEX ALIMENTARIOUS GUIDELINES ON NUTRITION LABELLING- **CAC/GL 2-1985**
 - ရပါဝင်မှု တံဆိပ်ကပ်ခြင်း ဆိုင်ရာလမ်းညွှန်
 - စားသုံးသူများမှ ကုန်ပစ္စည်းသတင်းအချက်အလက် ကိုပိုမိုသိရှိပြီး ရွေးချယ်ဝယ်ယူနိုင်ရန်
 - ကျန်းမာရေးအတွက် သင့်တော်သော အာဟာရ ဓါတ်ကို တွက်ချက်စားသုံးနိုင်ရန်
- PRINCIPLES AND GUIDELINES FOR THE ESTABLISHMENT AND APPLICATION OF MICROBIOLOGICAL CRITERIA RELATED TO FOODS - **CAC/GL 21 - 1997**
အစားအသောက်တွင် သက်ရှိပိုးမွှားပါဝင်မှုသတ်မှတ် ရာတွင် ကျင့်သုံးရမည့် စည်းမျဉ်းများ
- RECOMMENDED INTERNATIONAL CODE OF PRACTICE GENERAL PRINCIPLES OF FOOD HYGIENE - **CAC/RCP 1-1969, Rev. 4-2003**
 - Codex commission ၏ အစားအသောက် သန့်ရှင်းရေး ကျင့်စဉ်ကောင်း လမ်းညွှန်ချက်(GHP)၊
 - ဘေးအန္တရာယ် အဆင့်ဆင့်ကိုဆန်းစစ်ခြင်းနှင့် ထိန်းသိမ်းခြင်းစနစ်လမ်းညွှန်ချက် (HACCP)
- CODE OF PRACTICE FOR THE STORAGE AND TRANSPORT OF EDIBLE FATS AND OILS IN BULK - **CAC/RCP 36 – 1987** (Rev, : 1999, 2001, 2005, 2011, 2013 and 2015)
 - ဆီနှင့် စားသုံးအဆီများကို အများအပြားသယ်ဆောင် သိုလှောင်ရာတွင် ကျင့်သုံးရမည့် ကျင့်ထုံးများ
- CODE OF PRACTICE FOR THE CONTROL OF SALMONELLA IN OILSEEDS CRUSHING PLANS



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Laboratory Testing Requirements



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Baseline survey (Jan-Feb)

Regions	3- regions (Mandalay, Sagaing, Magway)
Exporters	Yangon (8) Magway (1) Mandalay(1)
Oil Mills	Yangon (2);Mandalay (6); Sagaing(3); Magway(11)
Collectors	Mandalay (3); Sagaing(4); Magway(4)
Associations	MPBSMA, CEXC at the regions, DOA, DTPCA
Townships	Mandalay (7); Sagain (8); Magway (3)
Villages	Mandalay(7); Sagaing (11); Magway(9)
Farmers	349 farmers
Collected Samples	Sesame (13); Groundnut(10); Sunflower(4); Sesame Oil (2); Groundnut Oil(5); Sesame Oil cake (2); Ground nut Oil cake(5); Water sample(2); Sand Sample(1)
Parameters to be tested	Safety (MRLs; Aflatoxins; Microbiology) Quality for oil (FFA <0.1%),

Challenges before the baseline collection-1

- Reliable Rapid tests kits-
 - not widely used in local market
 - not import commercially
- Test kits by produced by local lab
 - need validation



Challenges before the baseline collection-2

- To use the Codex and national standards as Ref.
 - Draft national standards for oilseeds- not yet announced
 - SPS measures by MoA
 - 39 banned pesticide list
 - Standards for Phyto certificate – Inspection of live pests
 - Parameters to be tested pesticide-
 - Aflatoxin (results in %);
 - MRL(Organochlorine, Organophosphate);
 - Heavy Metal(Hg, As, Cr, Cd, Pb)

Challenges after the baseline collection – List of parameters to test to comply with FDA regulations

- Codex Standards for Edible oil –CX-STAN 210:1999
- Safety Parameters:
 - Food Additives; Antioxidands; Heavy Metal (Pb, As)
 - Pesticide Residue (Codex MRLs)
 - Hygiene (CAC/RCP 1-1969, Rev. 3-1997),
- Quality Parameter
 - Peroxide value; Acid Value; Iodine Value
- Sample Analysis Methods
 - Fatty Acid Composition GLC
 - AOAC ; AOCS



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List of parameters to test to comply with international buyer markets requirement

Country	MRLs	Mocotoxins (Aflatoxin total and B1,B2,G1,G2)
Taiwan	Prohibited pesticide (ND)(61), Dry Beans (98), + Peanut (31), Sesame (10), Sunflower (21), Peanut oils(4), Sunflower oil(3),	Peanut (<15 ppb) Nuts (<10 ppb) Edible oils& fats (<10 ppb)
Japan	Peanuts(235), Sesame (127), Sunflower seeds (209), Peanut oil (7), Sunflower Oil (4)	ND
Korea	Peanut (78), Sesame (52), Sunflower (41), Nuts (5)	Nuts (2~10 ppb) Related max. moisture 7%
EU	EU MRL regulation 396/2005 (469) parameters	15.0 ppb (total) 8.0 ppb (B1) ND (M1) EU contaminant regulation 1881/2006

Challenges after the baseline collection – List of Parameters for Oilseeds Products Testing

Local Labs	Status	Parameters	Prices (MMK) per sample
MoAI (Pesticide)	Designated by MoA	Safety(Heavy Metal, Organocompounds, Aflatoxin)	5000~ 30000
FDA	Designated by MoH	Safety; Quality; Microbiological with Codex Standards of Oil	Unserviceable
CTQM	Designated by MoC	Safety (Organochlorine, Aflatoxin) Quality; Physical; Nutrients	1100~ 30000
MITS		Physical; Quality	1500~10000
FIDSL		Physical ; Quality; Microbiological; Nutrients	1600 ~ 31500
DRI(Analysis)	Designated by MoC	Physical; Quality;	5000~ 10000
Oil Quality Control Lab		Physical; Quality; Safety (Heavy Metal)	3000~ 30000

None of these laboratories is accredited.

Some Oilseeds Testing Labs – in abroad

Labs	Status	Parameters		Price (US\$)
OMIC (Bangkok lab) *	Accredited	550-MRL parameters (not cover Taiwan reg.)		100~200
SGS (Food lab Thailand)*	Accredited	249 – MRL parameters (not cover Japan reg.)		-
Central lab (Thailand)**	Accredited	81-MRL parameters (lower decimal place for Japan reg.)	MRL/sample	80~280
			Aflatoxin	100
			Micro	40~60
Eurofins (Germany)***	Accredited	Around 1100-MRL parameters (Cover all scopes of Target markets)	Salmonella	27
			Heavy Metal (Pb, Cd)	70
			Aflatoxin	69
			MRL package	260
			Contaminant package	70~300

*Exist agency to accept the sample

**No agent to accept the sample

***Contract with courier to accept the sample

Way Forward for Collaboration



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Inter-comparison of tests to be done in non accredited labs in Myanmar and abroad – Oilseeds Product

- Inter-comparison is essential either non-accredited or accredited lab
- Need to improve laboratory capability
- Way to build customer's trust on lab results before accreditation
- 1st step for oilseeds sector
 - MRLs especially banned pesticide of target market
 - Aflatoxin
 - Microbial Test



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Market surveillance - possibly joint with FDA

- FDA not announce the lab result but announce the health certificate
- Compared with other oilseeds lab during their Market surveillance ?
- FDA can produce the guideline for sample collection and lab testing
- Can improve the consistency within country
- Other labs can possibly joint with FDA in surveillance
- Useful for export

Joint Study (lab network/PTB/ITC) –

- Validation of results to assess the status of compliance
- Test kit producing by local lab
- Validation of test kits placed in market
- Share the result of accredited lab results to lab network
- Share the MRLs and regulatory requirement of target export market to the lab network
- Share the Validation Methods of target countries collected by ITC



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More Information about ITC STDF 486 Project : Newsletters, Brochure, and Project Report may also be found in www.Trade.gov.mm



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Q & A



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Group Discussion

For increasing of export, needs to enhance production

Accessible quality inputs, supportive export policy, System for quality assurance and food safety

- (1) What measures need to do
- (2) Who would responsible
- (3) How to implement

ပို့ကုန်မြှင့်တင်ရေးအတွက် ထုတ်လုပ်မှုတိုးတက်ရန်

အရည်အသွေးကောင်းသော သွင်းအားစုများရရှိရေး၊ ပို့ကုန်မူဝါဒ၊ အရည်အသွေး အာမခံနိုင်မှုစနစ်နှင့်

အစားအစာဘေးကင်းမှုစသည့် အချက်များဖြစ်ပေါ်လာရန်

(က) ဆောင်ရွက်ရန်လိုအပ်သည့်အချက်များ

(ခ) ဆောင်ရွက်သင့်သည့်ဌာန၊အဖွဲ့အစည်း

(ဂ) မည်သို့ဆောင်ရွက်သင့်ကြောင်းအကြံပြုချက်



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