

Annex 1. Comparative Analysis of National/State Assessment and Comments on CORROC

Note: Column 2: P = partial equivalent, Y = equivalent, and N = not equivalent

Detailed objectives and general requirements to address them	Assessment of CODEX Organic Standards	Analysis of National/State Organic Standards Assessments (10 standards)	Commonalities	Alignment	Consultants' Comments
1. Employ long-term, ecological, systems-based organic management.					
1.1 General Farming Management Systems:					
1.1.1 ensure the long-term management and resilience of an organic farm holding by respecting, maintaining, improving and completing ecological cycles and the quality of ecosystems and the landscape;	P: address as explanation	- 6 partial equivalent and 4 not address - Some standards address one of these 3 issues, i.e. ecological cycles, ecosystems, and landscape, but not all together. Some address them in the general principles or introduction.	no common	split	- Ecological cycle is quite abstract, not sure why this need to be in the standards objective. - Quality of ecosystems is a broad issue that is difficult to be address in organic standards. - Landscape is not well understood in the Asian context. - it is more likely to find these statements under introduction or general principles, rather than as standard requirement.
1.1.2 Attain ecological balance through the design of locally adapted farming systems;	P: address as explanation	- 1 partial equivalent and 9 not addressing - the one that address this is done as general principles	common	not align	- what is not locally adapted farming system, e.g. Are glass house or rain shelter locally adapted system? - it is more likely to find these statements under introduction or general principles, rather than as standard requirement.
1.1.3 do not rely upon switching between organic and conventional management.	Y --	- 6 equivalent and 4 do not address - even those do not address, do imply about this prohibition.	no common	split	- farmers who withdraw organic fields normally because good reason, e.g. sell the land, give to brother/sister/son/daughter. - in reality, have not come across any farmers doing this in Asia, so may be

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					unnecessary
Additional requirement		Laos: The CB (DOA) may not certify a producer who invades public forest for organic farming. The CB (DOA) reserves the right to consider the use of public forest for organic production on a case by case basis.			
1.2 Crop Production Management Systems:					
1.2.1 are based on conserving or improving soil structure, organic matter, soil fertility and biodiversity;	P: biodiversity is not addressed	- 4 equivalent, 3 partial, and 3 do not address it - All 3 who partially address this, did not address biodiversity.	common	Align	- quite similar to 2.1.2 - improvement of soil fertility already take care of soil structure or organic matters, no need to put 3 things there together (confusing) - does biodiversity refer to general biodiversity or specifically soil biodiversity? - suggest to revise to “based on conserving or improving soil fertility (biological, physical, and chemical)”
1.2.2 include a diverse crop rotation as an integral part of the management system of the holding. For perennial crops this includes cover crops (green manures) and/or other plant-based ground cover. For annual crops this includes minimum crop rotation practices, cover crops (green manures) or other diverse plant production with comparable achievements;	P: cover crops in the perennial is not addressed	- 7 equivalent, 2 partial, and 1 do not address it - the 2 partial equivalent address this as general principles, not as standard requirements	common	Align	- too descriptive - no need to set objective on minimum crop rotation - suggest to revise to “integrate crop rotation and/or cover crop as part of cropping system or having diverse plant productions as to promote on-farm plant biodiversity”

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1.2.3 promote and sustains the health of crops while maintaining productivity and the integrity of the agro-ecosystem. This is accomplished through interrelated positive processes and mechanisms for the management of pests, diseases, and weeds. These include but are not limited to site and crop adapted fertility management and soil cultivation, choice of appropriate varieties, enhancement of functional biodiversity; and in case additional measures are required, restricted use of crop protectants and growth regulators.	Y: --	- 7 equivalent, 1 partial, and 2 do not address it - the 1 partial equivalent address this as general principles, not as standard requirements	common	Align	- too descriptive, not clear what are the key objective of this particular point - how to define "sustain the health of crops", "maintaining productivity", and "integrity of the agro-ecosystem" - fertility management is already addressed in 1.2.1. - meaning of "enhancement of functional biodiversity"
1.2.4 Excluded systems: Hydroponic production.	N: not address	- 1 equivalent, no partial, and 9 do not address it - likely that several standards may implicitly exclude this practice	common	not align	- clear
1.3 Animal Production Management Systems:					
1.3.1 are based on the harmonious relationship between land, plants and animals;	P: address as general principle	- 2 have no livestock standards, 1 equivalent, 3 partial, and 4 do not address - those partially address are done as general principles or recommendations	no common	split	- it is a general principle and more likely to find these statements under introduction or general principles, rather than as standard requirement.
1.3.2 assure the health of animals and meet their physiological needs;	P: address as definition	- 2 have no livestock standards, 4 equivalent, 3 partial, and 1 do not address - those partially address are done	common	Align	- -

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		as general principles			
1.3.3 treat animals respectfully and support their natural and social behavior and welfare;	Y: --	- 2 have no livestock standards, 2 equivalent, 3 partial, and 3 do not address - those partially address are done as general principles or do not address the treatment of animal respectfully	no common	split	- treating animal respectfully is more a general principle and should not be in CORROC - may be more explicit to address about herd animals must be raised as herd - suggest to revise to "support animal's social behavior by raising heard animals in a group" and move to section 7
1.3.4 preserve the agroecosystem and surrounding environment.	Y: --	- 2 have no livestock standards, 1 equivalent, 2 partial, and 5 do not address - those partially address are done as general principles	common	not align	- it is implicit in other part of organic standards - similar to 4.1.1 (risks of environmental pollution are identified and minimized) 4.2.3 (Pollution of the environment by fertility inputs and practices is prevented) and 4.2.5 (Measures are employed to prevent pollution, and otherwise preserve water quality) - Not sure why this is part of the animal production rather than as general farming system (i.e. 1.1)
1.4 Beekeeping Management Systems:					
1.4.1 maintain bee colonies as an integral part of the ecosystem and support their natural cycles.	P: address as general principle and supporting natural cycles is not addressed	- 6 have no bee-keeping standards, 0 equivalent, 3 partial, and 1 do not address - those partially address are done as general principles	common	Align	- normally bee is included in the livestock standards and the same requirements apply - Not sure what "integral part of the ecosystem" means and what is not, i.e. if bee is raised under organic farm, is it considered as part of the ecosystem or part of agro-ecosystem - not sure what "support their natural cycles" means and what is not

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1.5 Aquaculture Management Systems:					
1.5.1 maintain well-being of the farmed species, the biodiversity of natural aquatic ecosystems, the health of the aquatic environment, and the quality of surrounding aquatic and terrestrial ecosystems.		NOT APPLICABLE			
1.6 Wild Collection Management Systems:					
1.6.1 do not exceed sustainable yield of the local ecosystem, nor threaten the existence of plant, fungal or animal species, including those not directly exploited.	Y: --	- 1 have no wild-harvest standards, 7 equivalent, and 2 do not address	common	Align	- this is quite descriptive, normally the standards only mention about disturbance of natural ecosystem, rather than specifically mention plant, fungal or animal species
1.6.2 collect products only from within the boundaries of the clearly defined wild collection area.	Y: --	- 1 have no wild-harvest standards, 7 equivalent, and 2 do not address	common	Align	–
1.7 Processing Management Systems:					
1.7.1 maintain organic integrity of processed products, contribute to health and well-being of humans and animals (in the case of animal feed), produce high-quality products and protect the environment.	P: contribution to health and well-being and production of high-quality products are not addressed	- 8 partial equivalent, and 2 do not address it - those partial equivalent are either address as general principles and do not address the contribution to health and well being as well as high-quality products and environmental protection	common	Align	- have too many objectives within this point - contribution to health, well-being of human and animals, and producing high-quality products are general principles and may be unnecessary here - environmental protection is already covered under 4.1.1
1.8 Transition/Conversion Requirements for Organic					

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Production Management Systems:					
1.8.1 clearly identify when organic practices begin and how long they are applied before the operation and products can be considered organic, taking into consideration the balance of the ecosystem and the skills of the operator. This may include specific conditions for simultaneous transition/conversion of land and animals and is no less than twelve months for the system.	Y: --	- 2 partial and 8 equivalent - those partial equivalent do not clearly state when the conversion begins	common	Align	- the wording may be incorrect, it perhaps should be "when organic conversion begin" rather than "when organic practices begin" - not sure why there is requirement of how long before the operation can be considered organic. It seems irrelevant. It is understood to identify how long the products can be considered as organic. - the issue about the length of conversion for crop should be integrated with 1.8.2 while the simultaneous conversion of land and animals should be set as separate issue
1.8.2 for crops, establish a suitable period of organic management prior to the organic status of a crop, during which contaminants are reduced, and healthy soils and sustainable ecosystems are being established, and which is no less than twelve months.	Y: --	- 1 partial, 7 equivalent, and 2 not equivalent - the partial and not equivalent is because no conversion or less than 12 month minimum is possible in special circumstances, e.g. new or virgin land, traditional farming, land with long history of non-use of prohibited substances	common	Align	- the reduction of conversion is normally considered not contaminants are reduced and healthy soil or sustainable ecosystem are established, rather by the history of non-use of prohibited substances - the specification of minimum conversion time of 12 months makes it not possible to make equivalent determination, it forces the assessment to be compliance only
1.8.3 raise animals organically from birth or hatching, or when this is not possible from early ages subject to a minimum transition/conversion requirement. Guidelines for minimum transition/conversion requirements: dairy – 90 days.	P: conversion for egg is 36 days	- 5 equivalent, 2 partial, and 1 do not address (2 have no livestock standards) - those partial equivalence have lower minimum for some products	common	Align	--

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eggs and poultry meat – 42 days; other meat – 12 months; aquatic animals – two thirds lifespan or 12 months, whichever is shorter; bee colonies – time needed for wax replacement with minimum twelve months.					
Additional requirement		Laos: A: biennial crops has conversion time same as annual crops, i.e. 12 months			--
2. Assure long-term, biologically-based soil fertility					
2.1 Soil Fertility Management:					
2.1.1 nourishes plants primarily through the soil ecosystem, and achieves nutrient balance.	P: address as definition not as requirement	- 4 partial and 6 do not address - those partial because they address the issue as general principle or do not specifically address soil ecosystem	not common	split	- None of the standards specifically mention “nourishing plant through soil”. It is addressed as part of fertility management.
2.1.2 enhances the soil-ecosystem and achieves nutrient balance primarily by incorporating manures and other biodegradable inputs, and/ or by nitrogen fixation from plants.	Y: --	- 2 partial, 7 equivalent and 1 does not address - those partial because they address the issue as general principle	common	Align	- None of the standards specifically mention “soil-ecosystem”. It is addressed as part of fertility management.
2.1.3 employs measures to recycle organic materials within the production system.	P: not address that organic materials are from within the system	- 3 partial, 2 equivalent and 5 do not address - those partial because they address the issue as general principle or only for animal manure produced on farm	not common	split	- Many standards require recycling of organic materials but not specify that they are from within the same production system - the issue is the same as 4.1.2 “Organic systems employ measures to reduce, reuse, and/ or recycle residual materials”

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2.1.4 uses naturally occurring mineral fertilizers only as a supplement to biologically-based fertility methods.	Y: --	- 7 equivalent and 3 do not address - Two standards allowed the use of mineral fertilizers without the restriction as supplement. One allow chemical fertilizers in the compost.	common	Align	--
2.1 5 excludes or restricts certain practices that may be inconsistent with organic management objectives including: - use of sodium nitrate - land preparation by burning - use of human excrement on crops for human consumption	P: sodium nitrate is not in the positive list, thus not allowed. Burning is not addressed.	- 6 partial, 3 equivalent and 1 does not address - 4 standards do not explicitly prohibit the burning, may be regulated by other national regulations - 2 standards allow human excrements in food crop but with quite stick restrictions, e.g. compost	common	Align	- not sure which among the three in the list is excluded and which is restricted
3. Avoid/minimize synthetic inputs at all stages of the organic product chain and exposure of people and the environment to persistent, potentially harmful chemicals.					
3.1 Crop Production:					
3.1.1 uses only crop production inputs, including fertility substances and active substances for pest/disease/growth management, that are on the Indicative lists of substances for organic production and processing in international organic standards, or they comply with the criteria for these lists, or	Y: --	- 9 equivalent and 1 is not equivalent - One non-equivalent because allow the use of chemical pesticides if approved by CB	common	Align	--

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they are otherwise explicitly approved in these standards.					
3.1.2 Co-formulants (e.g. inerts and synergists) in formulated farm input products are not carcinogens, mutagens, teratogens or neurotoxins.	Y: not in the positive list, thus not allowed.	- all 10 equivalent - none specifically address this but none of co-formulants in the positive list of their standards	common	Align	- It is difficult to make assessment which inputs are carcinogens, mutagens, teratogens or neurotoxins. Need to find more transparent way of setting this objective. -
3.1.3 Excludes any use of synthetic nitrogen fertilizers and superphosphates.	Y: not in the positive list, thus not allowed.	- 1 partial, 8 equivalent and 1 not equivalent - one partial is because it does not specifically prohibited these inputs while one not equivalent because allow chemical fertilizers in the compost	common	Align	--
3.2 Animal Production					
3.2.1 excludes synthetic feed rations: amino acids, nitrogen compounds (e.g. urea), growth promoters, stimulants appetizers, preservatives and coloring agents .	Y: amino acid is not in the positive list, thus not allowed	- 6 equivalent, 1 partial, and 1 do not address (2 have no livestock standards) - one partial because the standards do not specifically prohibited synthetic amino acid, nor appetizers.	common	Align	--
3.2.2 vitamins, trace elements and supplements provided to animals are from natural sources unless they are not available in sufficient quantity and/ or quality.	Y: --	- 7 equivalent and 1 do not address (2 have no livestock standards)	common	Align	--

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3.2.3 excludes from the system all prophylactic use of synthetic allopathic veterinary drugs.	Y: --	- 6 equivalent and 2 do not address (2 have no livestock standards)	common	Align	--
3.2.4 use of antibiotic and other allopathic veterinary drugs for animals is strictly limited to the treatment of illness and injuries under the supervision of qualified personnel, and subject to defined withdrawal periods that are not less than double that required by legislation.	Y: --	- 6 equivalent, 1 partial and 1 does not address (2 have no livestock standards)	common	Align	--
3.2.5 in aquaculture, all use of allopathic veterinary medication for invertebrates is excluded from the system.	--	n.a.			n.a.
3.3 Processing					
3.3.1 Processing methods other than biological, mechanical or physical techniques are restricted.	Y: --	- 8 equivalent and 2 not address	common	Align	--
3.3.2 Any additives, processing aids or other substances that are used and modify organic products are on the indicative lists of international organic standards, or comply with the criteria for these lists, or are otherwise explicitly allowed in these standards.	Y: --	- 7 equivalent, 1 partial and 1 not address and 1 relevant part of standards is not available for assessment	common	Align	--
3.3.3 Solvents used for extraction are restricted and are on the indicative lists of international organic standards, or comply with	Y: --	- 8 equivalent and 2 not address	common	Align	--

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the criteria for these lists.					
3.3.4 Disinfecting and sanitizing substances that may come in contact with organic products are restricted to water and substances on the indicative lists of international standards or comply with the criteria for these lists.	not address	- 6 equivalent, 3 partial and 1 not address - some partial equivalent because they only address about disinfectant for equipments, storage, and transport, not the organic product	common	Align	--
3.4. Contamination					
3.4.1 Precautionary measures are taken to avoid contamination.	P: only addressed at the stage of processing	- 6 equivalent, 3 partial and 1 not address - some partial equivalent because they address these as general principle or only for storage and transport (not for farm production)	common	Align	- not sure what kind of precautionary measures are needed - should this be a generic statement like this or should assess whether specific measures are included in the standards, e.g. buffer zone, no spraying in storage when organic products are stored - similar to 3.4.2
3.4.2 Where there is reasonable suspicion of contamination, an investigation is made, the source of the contamination sought and measures are taken to address the problem.	N: not address	- 3 equivalent, 7 not address	common	not align	- This is quite similar to 3.4.1 but more descriptive than 3.4.1 as it requires investigation
4. Minimize pollution and degradation of the production/processing unit and surrounding environment from production/processing activities.					
4.1 General					
4.1.1 risks of environmental	N: not address	- 2 equivalent, 3 partial and 5 not	not	split	- the standards normally break down in

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pollution are identified and minimized.		address - those partial because they may address this as general principles or certain part of the operation, e.g. animal manure, or processing wastes	common		various parts, e.g. fertilization in crop management, manure handling, stocking rate, processing waste handling, etc. - this is similar to 1.3.4 (preserve the agroecosystem and surrounding environment), 4.2.3 (Pollution of the environment by fertility inputs and practices is prevented) and 4.2.5 (Measures are employed to prevent pollution, and otherwise preserve water quality)
4.1.2 organic systems employ measures to reduce, reuse, and/or recycle residual materials.	P: address as explanation and only the recycle issue	- 2 equivalent, 3 partial and 5 not address - those partial because they either only address some part of the standards, e.g. in crop but not animal productions	not common	split	- the same as 2.1.3 “employs measures to recycle organic materials within the production system” - none standards explicitly address the reduction of residual materials, only the reuse and recycling (which is the same?)
Additional requirement		Taiwan State: - simple packaging, not excessive - give preference biodegradable, recyclable, or reusable			
4.2 Farm Production and Beekeeping					
4.2.1 Biodiversity is maintained or enhanced on the farm holding, in crop and non-crop habitats.	P: only address as definition, covering only on the livestock standards, not crop standards	- 4 equivalent, 3 partial and 3 not address - those partial because they address this as general principle	common	Align	This objective is very difficult to verify in practice (in inspection). Unless it is revised to make it verifiable, it may be better to drop it off as core objective as many standards address this as general principles and not as requirement.
4.2.2 Measures are employed to prevent land degradation, such as erosion and salinization.	N: not address	- 4 equivalent, 1 partial and 5 not address - those partial because they do not address soil salinization.	not common	split	Clear, but some countries may address this objective under other regulations.

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4.2.3 Pollution of the environment by fertility inputs and practices is prevented.	P: only address livestock, not crop standards	- 5 equivalent, 1 partial and 4 not address - those partial because they address it as general principle	not common	split	It is quite rare to have this situation in Asia, this is why many standards do not address it. Pollution from livestock manure is more likely but this is already addressed in 4.1.1.
4.2.4 Management systems ensure that water resources are used sustainably	N: not address	- 3 equivalent and 7 not address	common	not align	May be more appropriate for aquaculture production than crop or livestock.
4.2.5 Measures are employed to prevent pollution, and otherwise preserve water quality.	P: only address livestock, not crop standards	- 2 equivalent, 2 partial and 6 not address	not common	split	This is repetitive with 4.2.3 and 4.1.1, and it may be relevant only for aquaculture
4.2.6 Any actions that negatively impact high conservation value areas are excluded from organic systems.	N: not address	- 10 not address	common	not align	This may be relevant for wild-harvest and bee-keeping but it is already addressed by 1.6.1 unless the high conservation value are really different.
4.2.7 Use of synthetic coverings and mulches is restricted.	N: not address	- 3 equivalent, 1 partial and 6 not address	not common	split	--
4.2.8 Stocking density management in animal production ensures sustainable land and water use.	Y: --	- 3 equivalent, 3 partial and 2 not address (2 have no livestock standards) - those partial because they do not address sustainable water use	common	align	Sustainable water use for livestock is not quite necessarily in many local context, this is why it is not regulated.
4.2.9 Animal production systems use breeds suited to the region and the production method.	Y: --	- 5 equivalent, 1 partial and 2 not address (2 have no livestock standards) - those partial because they address this as general principle	common	Align	It is not clear what the objective of appropriate breeds suitable for production method.
4.2.10 Bee races are adapted to the local environment and conditions.	Y: --	- 2 equivalent and 2 partial (6 have no bee-keeping standards) - those partial because they address this as general principle	not common	split	--

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4.3 Aquaculture					
4.3.1 Aquatic plants are managed in a manner that avoids any degradation of the production area or the surrounding ecosystem.		NOT APPLICABLE			
4.3.2 measures are taken to prevent introduced or the cultivated stocks from escaping into the ecosystem.		NOT APPLICABLE			
4.3.3 non--organic aquatic animal protein and oil may only be used if they derive from wild marine products harvested from verifiable sustainable sources or from by-products from fishery for human consumption		NOT APPLICABLE			
4.3.4 The release of nutrients and waste into the aquatic ecosystem is minimized.		NOT APPLICABLE			
4.3.5 production units are designed and managed to maintain water quality.		NOT APPLICABLE			
4.4 Wild Collection					
4.4.1 Excludes from the system collection of any protected or endangered species.	N: not address	- 2 equivalent and 7 not address (1 have no wild harvest standards)	common	not align	This is illegal and thus not included in most standards.
5. Exclude certain unproven, unnatural and harmful technologies from the system.					
5.1 Genetically Modified					

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Organisms					
Organic production and processing management systems:					
5.1.1 preserve the genetic integrity of varieties and traditional ecotypes;	N: not address	- 10 not address	common	not align	Not clear what it means?
5.1.2 exclude deliberate use or negligent introduction of genetically modified organisms (GMO) or their derivatives, except vaccines, in all stages of organic production and processing.	N: negligent introduction is not addressed	- 2 equivalent, 8 partial equivalent - those partial equivalent because they do not address negligent introduction is not addressed	common	Align	Most standards do not address the negligent introduction of GMOs. More explanation is needed to indicate what are specific practices to prevent the negligent introduction.
5.2 Ionizing radiation					
Organic management systems:					
5.2.1 exclude use of ionizing radiation.	y: --	- 10 equivalent	common	Align	--
5.3 Breeding Techniques:					
5.3.1 use only breeding techniques consistent with organic production methods are used. This includes artificial insemination. 5.2.4-5 Hormonal induction of ovulation and birth, and embryo transfer techniques and cloning are excluded from the system.	y: --	- 5 equivalent, 1 partial and 2 not address (2 have no livestock standards)	common	Align	What is "5.2.4-5"? Is it typo?
5.3.2 In aquaculture, exclude from the system any use of artificially polyploid organisms or artificially produced monosex stock and synthetic hormones to		NOT APPLICABLE			

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artificially stimulate reproduction.					
6. Avoid pollution from surrounding environment					
6.1 Wild collection					
6.1.1 Wild collection areas are not compromised by treatment or environmental pollution.	Y: -	- 5 equivalent, 3 partial and 1 not address (1 have no wild harvest standards) - those with partial equivalent because they do not address environmental pollution	common	Align	--
Additional requirement		Laos: wild collector must be member of the community and approved by the community as a producer or operator who has the potential to harvest the product in a sustainable manner.			
6.2 Beekeeping					
6.2.1 In beekeeping systems, hive placement minimizes the risk of contamination.	Y: --	- 3 equivalent and 1 partial (6 have no bee-keeping standards)	common	Align	--
6.3 Aquaculture					
6.3.1 In aquaculture, the production units have an appropriate distance from contamination sources and conventional aquaculture.		NOT APPLICABLE			
7. Treat animals responsibly					
7.1 Living conditions					

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7.1.1 Living conditions (including housing) provided to the animals: - afford them comfort and safety - allow them to exhibit natural behavior - give them freedom of movement - allow access, whenever weather allows, to open air, exercise areas and/or, pasture, which include shade.	Y: --	- 6 equivalent, 1 partial and 1 not address (2 have no livestock standards)	common	Align	--
7.1.2 Confinement of calves for veal production and of any animals in cages is excluded from the system.	N: confinement for fattening is allowed as exception	- 4 equivalent, 1 partial and 3 not address (2 have no livestock standards)	not common	split	--
7.2 Physical Alterations					
7.2.1 Physical alterations are generally excluded from the system. - In beekeeping this includes clipping the wings of queen bees. - Standards may allow specific exemptions when good management practices are insufficient to ensure the health and welfare of the animal and/ or operator or when it is specifically required for meat quality. Physical alternations performed under exceptions employ measures to minimize suffering.	Y: --	- 3 equivalent, 1 partial and 3 not address or not equivalent and 1 does not provide information (2 have no livestock standards)	not common	split	--
7.3 Breeds and Breeding					
7.3 1 Animal production systems use breeds that reproduce	Y: --	- 1 equivalent, 5 partial and 2 not address (2 have no livestock	common	Align	--

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successfully under natural conditions and without routine human involvement.		standards) - those with partial equivalent because they either address it as general principle or as recommendation but not requirement			
7.4 Transport and Slaughter, and Honey Harvest					
7.4.1 Animal stress and suffering is avoided during the movement, handling and slaughter of animals - use of any injurious devices e.g. electric prods, and tranquilizers and stimulants is excluded from the system.	Y: --	- 5 equivalent, 1 partial, 1 not address and 1 do not provide information (2 have no livestock standards)	common	Align	--
7.4.2 Aquatic vertebrates are stunned before slaughter.		NOT APPLICABLE			
7.4.3 deliberate killing of bees during honey harvesting is excluded from the system.	Y: --	- 2 equivalent and 2 not address (6 have no bee-keeping standards)	not common	split	--
8.1 Nutrition					
8.1.1 Organic livestock systems provide animals with a diet that consists of high quality and nutritious organic feed. - Any use of non-organic feed is specified, is strictly limited to non-accessibility of organic feed and time limited.	P: high quality and nutritious feed are not addressed	- 3 equivalent, 4 partial, 1 not address and 1 do not provide information (2 have no livestock standards) - those with partial equivalent because they do not address high quality and nutritious feed	common	Align	This objective contains difficult-to-qualify issues like high quality feed, and nutritious feed.
8.1.2 Nutrition practices are consistent with the animals' natural	P: minimum weaning is not	- 3 equivalent, 3 partial, 2 not address and 1 do not provide	common	Align	May be too many objectives within one point.

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<p>needs</p> <ul style="list-style-type: none"> - Included are feed rations that meet the nutritional and dietary requirements of the species e.g. access to roughage for ruminants. - Excluded are feeding slaughter products of the same species to all animals, any slaughter waste to ruminants, and all types of excrements. - There is a weaning period for young animals, which is based on the natural behavior of the species. 	defined	<p>information (2 have no livestock standards)</p> <ul style="list-style-type: none"> - those with partial equivalent because they do not address weaning period or allow slaughter products for some animals only. 			
Beekkeeping:					
8.1.3 In beekkeeping, supplementary feed is organic and is restricted to colony welfare.	Y: --	<ul style="list-style-type: none"> - 3 partial equivalent and 1 not address (6 have no bee-keeping standards) - those with partial equivalent because they allow conventional feeds if organic feeds are insufficient 	common	Align	--
8.1.4 Harvesting methods ensure that there are sufficient food reserves left behind for the survival of the colony during the dormancy period.	Y: --	<ul style="list-style-type: none"> - 2 equivalent, 1 partial and 1 not address (6 have no bee-keeping standards) 	common	Align	--
Aquaculture					

Detailed objectives and general requirements to address them	Assessment of CODEX Organic Standards	Analysis of National/State Organic Standards Assessments (10 standards)	Commonalities	Alignment	Consultants' Comments
8.1.5 In aquaculture, Aquatic animals are fed predominantly organic feed. The use of non-organic feed is specified; it is strictly limited to non-accessibility of organic feed and time limited.		NOT APPLICABLE			
8.2 Health Care					
8.2.1 Health care practices follow the principle of positive health; the graduated approach of prevention, including appropriate vaccinations, then natural medicines and treatment, and finally if unavoidable, treatment with allopathic drugs. Where veterinary medicinal products are administered, conversion requirements apply. See section 3.2 3-3.2.5 for related information	Y: --	- 7 equivalent and 1 not address (2 have no livestock standards)	common	Align	--
8.2.2 Medical treatment considered necessary for the welfare of an animal is never withheld in order to maintain the organic status of the animal. Animals are not allowed to suffer for lack of treatment.	Y: --	- 2 equivalent, 1 partial and 5 not address (2 have no livestock standards) - those with partial equivalent because they	common	not align	--
Beekeeping:					
8.2.3 The health and welfare of bee colonies is primarily achieved through good management and hygienic practices.	Y: --	- 3 equivalent and 1 not address (6 have no bee-keeping standards)	common	Align	--

Detailed objectives and general requirements to address them	Assessment of CODEX Organic Standards	Analysis of National/State Organic Standards Assessments (10 standards)	Commonalities	Alignment	Consultants' Comments
8.2.4 When preventative health measures fail, veterinary medicinal products may be used provided that preference is first given to phyto-therapeutic and homeopathic treatments, and then: <ul style="list-style-type: none"> - lactic, formic, oxalic, acetic acid - sulfur - natural essential oils. 	Y: --	- 3 equivalent and 1 not address (6 have no bee-keeping standards)	common	Align	--
8.2.5 Methods permitted for hive and honey comb disinfection are restricted to steam, direct flame , caustic soda and Bacillus thuringiensis.	Y: --	- 3 equivalent and 1 not address (6 have no bee-keeping standards)	common	Align	--
Aquaculture					
8.2.6 Health is promoted and disease controlled through preventive, system-based methods. Objectives and requirements for livestock that are relevant to aquatic organisms are included in the management system.		NOT APPLICABLE			
8.2.7 Stocking densities do not compromise the animals' welfare.		NOT APPLICABLE			
8.2.8 Production units are designed and managed to maintain the health and natural behavior of the stock.		NOT APPLICABLE			
9.1 Production					

Detailed objectives and general requirements to address them	Assessment of CODEX Organic Standards	Analysis of National/State Organic Standards Assessments (10 standards)	Commonalities	Alignment	Consultants' Comments
<i>Seeds and Seedlings</i>					
9.1.1 Organic practices are implemented along the entire production chain from propagation to final product including the production of seed and propagation materials wherever possible.	Y: the organic practice along the entire production chain is implicate	- 3 equivalent and 7 not address	common	not align	If the issue is to use organic seeds and planting materials, then it is already addressed in 9.1.2. However, if it tries to focus on on-farm production of seeds and planting materials, then it should be revised to make it clearer.
9.1.2 Seed and plant propagation material is of organic quality unless such seed and material is unavailable.	Y: --	- 8 equivalent and 2 partial equivalent - those with partial equivalent because they only address seed but not other plant propagation	common	Align	clear
9.1.3 All substances used for treatment of all seed material are on the Indicative List of Substances for Organic Production and Processing in international organic standards or comply with the Criteria for these lists, unless treatment with other substances is legally required or unless seed not treated with these other substances is regionally unavailable. Exemptions are limited in time.	Y: --	- 6 equivalent and 4 do not address	not common	split	The objective seems unnecessary because 9.1.2 already require to have organic or not treated seeds. Once they have the seeds then it is implicitly that they cannot use any prohibited substances to treat the seeds except those already allow to use for crop pest and disease control. If the main issue is about the legal requirement of treating seeds, then it should be more clearly stated.
9.1.4 Seedlings are of organic quality.	Y: seedling is included in vegetative reproductive materials	- 7 equivalent and 3 do not address	common	Align	similar to 9.1.2, therefore should be combined
<i>Parallel and Split Production</i>					

Detailed objectives and general requirements to address them	Assessment of CODEX Organic Standards	Analysis of National/State Organic Standards Assessments (10 standards)	Commonalities	Alignment	Consultants' Comments
9.1.5 The integrity of the organic farm unit is not compromised by the management of the non-organic operation.	Y: --	- 4 equivalent, 2 partial equivalent, and 4 do not address	not common	split	Not quite clear what it is looking for, i.e. what practices are prohibited or what practices are to be implemented.
9.1.6 The non-organic and organic parts and products of holdings with split or parallel production are completely and clearly separated, e.g. physical barriers, management practices, storage of inputs and products.	Y: --	- 6 equivalent, 1 partial equivalent, and 3 do not address	common	Align	clear
Animal Production					
9.1.7 The organic integrity of animals is maintained during movement, handling and slaughter.	N: not address	- 4 equivalent, 1 partial and 3 not address (2 have no livestock standards)	not common	split	clear
9.1.8 In aquaculture, all components of agricultural origin are organic.		NOT APPLICABLE			
9.2 Processing and Handling					
9.2.1 Organic products are processed separately in time and/or place from non-organic products.	Y: --	- 6 equivalent and 4 do not address	not common	split	This could be incorporated with 9.2.2 because it is essentially about prevention of co-mingling.
9.2.2 Measures are taken to prevent co-mingling of organic products with non-organic products in processing, packaging, storage and transport.	Y: --	- 7 equivalent, 2 partial equivalent, and 1 do not address	common	Align	Clear
9.2.3 Organic processed products are made from organic ingredients	Y: --	- 7 equivalent and 3 partial equivalent	common	Align	Clear

Detailed objectives and general requirements to address them	Assessment of CODEX Organic Standards	Analysis of National/State Organic Standards Assessments (10 standards)	Commonalities	Alignment	Consultants' Comments
except for when they are not available. Use of non-organic ingredients is time-limited. - Use of the same ingredient in organic and non-organic quality is excluded from the system.					
9.2.4 Use of any substance primarily to correct losses of properties during processing except where required by law or strongly recommended by authorities is excluded from the system	Y: --	- 6 equivalent and 4 do not address	not common	split	May be better to use the simple language, e.g. use of vitamins and minerals to enhance the nutritional value of the products during processing is excluded, except when it is required by law or strongly recommended by authorities of producing and/or importing countries
9.2.5 Filtration techniques used in organic processing do not chemically react with or modify the product at the molecular level.	N: not address	- 4 equivalent and 6 do not address	not common	split	This standard is too specific to be a common objective. Instead, it should focus on the negative effect of food by processing methods or techniques.
9.2.6 Management systems for cleaning and disinfecting surfaces, machinery and processing facilities are in place and they prevent contamination of organic product	Y: --	- 7 equivalent, 2 partial equivalent, and 1 do not address	common	Align	clear
9.2.7 During processing and handling organic products are protected from pests and diseases without compromising the organic integrity of the product.	Y: --	- 6 equivalent, 2 partial equivalent, and 2 do not address	common	Align	Similar to 1.7.1 which address the integrity of the processing and handling, therefore should merge into one.
9.2.8 Pests are managed according to a hierarchy of practices starting with prevention,	Y: --	- 7 equivalent, 2 partial equivalent, and 1 do not address	common	Align	clear

Detailed objectives and general requirements to address them	Assessment of CODEX Organic Standards	Analysis of National/State Organic Standards Assessments (10 standards)	Commonalities	Alignment	Consultants' Comments
and then physical, mechanical, biological methods and substances on Lists international organic standards or that comply with the Criteria for these lists.					
9.2.9 Packaging and storage/transportation containers do not contaminate the organic product they contain.	P : contamination from packaging is not addressed	- 8 equivalent, 1 partial equivalent, and 1 do not address	common	Align	clear
Additional Requirement		Laos: prohibited to use styrofoam for packaging organic products			
10. Provide organic identity in the supply chain.					
10.1 Labeling					
10.1.1 Labeling clearly identifies organic products and provides relevant information for consumers to make informed, conscious choices and to avoid misleading them	Y: --	- 9 equivalent and 1 do not address	common	Align	The clear identification of organic label is clear. What is not clear is what constitute relevant information for consumer. It is quite normal that there is other laws and regulations on labelling and thus the organic standards omit the details of the labelling requirements.
10.1.2 Products labeled as "organic" or "in-conversion", or an equivalent term (e.g. biologic or ecological), comply with the applicable organic standards.	Y: --	- 9 equivalent and 1 do not address	common	Align	clear
10.1.3 Full disclosure of ingredients is provided, including whether or not they are organic.	P: indication whether they are organic or not is not addressed	- 4 equivalent, 4 partial equivalent, and 2 do not address - those with partial equivalent because they do not require full disclosure as other law already	common	Align	It is quite normal that there is other laws and regulations on labelling and thus the organic standards omit the details of the labelling requirements. However, the issue of indicating whether such

Detailed objectives and general requirements to address them	Assessment of CODEX Organic Standards	Analysis of National/State Organic Standards Assessments (10 standards)	Commonalities	Alignment	Consultants' Comments
		have this requirement			ingredints are organic or not is still relevant.
10.1.4 Labels identify the person or company legally responsible for the product and the body that assures conformity to the applicable organic standard	Y: --	- 5 equivalent, 3 partial equivalent, and 2 do not address - those with partial equivalent because other law already have this requirement	common	Align	It is quite normal that there is orther laws and regulations on labelling and thus the organic standards omit the details of the labelling requirements.
10.1.5 Processed products labeled as "organic" contain at least 95% organic ingredients (by weight).	Y: --	- 10 equivalent	common	Align	clear
10.1.6 Labels for in-conversion products or similar terms are clearly distinguishable from labels for organic products.	Y: --	- 9 equivalent and 1 do not address	common	Align	clear