

**Audit Preparation Checklist (for ASC Pangasius Standard):**

**Purpose:**

This document has been developed to serve farms to prepare for their **first** (initial) on-farm ASC audit. *This document is not applicable for surveillance and/or re-audits (!).*  
 If a farm does not have the needed documents/preparations available at the day(s) of the audit, this *may* lead to delays in the audit process & *may* lead to higher costs (e.g. auditors may need more time to process documents).

**Reference:**

Information in this document has been taken from the ASC Pangasius Audit Manual (AM). All Appendixes in this document are referring to the ASC Pangasius Standard Appendixes.

*This document **does not** replace the Audit Manual! In case text in the checklists differs from Audit Manual, the Audit Manual is leading.*

Applicability	Reference in AM	Description	Timeframe	Check	Remarks
<p><b>Preamble:</b>                      In order to determine the level of compliance against the ASC Pangasius Standard it is essential to use information of completed crop cycle(s), or on a specific point in time in the crop (e.g. stocking) for several requirements. For this reason, for first audits, it is necessary for farms to present full data on at least one or more completed crop cycle(s) per site at the time of the assessment.</p> <p>Therefore, at the time of the first audit:</p> <ul style="list-style-type: none"> <li>farmer must be able to show full records (e.g. feed-use, mortality rate, etc.) of at least 1 completed crop cycle per site (i.e. from stocking to harvest) and the relevant information for all the crops stocked after having stocked that crop</li> <li>certifier must use these records of each site to calculate the level of compliance of the relevant indicators</li> </ul> <p>Applicable to all relevant requirements in this Audit Manual:  <b>Client:</b> At first audit: data of at least 1 full crop cycle per site must be made available to certifier.  <b>Auditor:</b> At first audit: data of at least 1 full crop cycle per site must be used to determine compliance.</p>					
All farms	1.1.1	a. Provide records to show the farm has all registrations as required by local and national authorities.	N/A		
		b. Provide an aquaculture farming licence (as applicable).	N/A		
		c. Provide a commercial licence (as applicable).	N/A		
		d. Provide any other contracts, licences, or permits as required by local and national authorities (also see 1.1.3. and 1.1.4).	N/A		
	1.1.2	a. Provide records of tax payments to appropriate authorities (e.g. land use tax, water use tax, revenue tax) for the last 12 months. For first audits, farm records must cover ≥ 6 months.	≥ 6 months before first audit		
b. Perform updated information on applicable tax laws for the jurisdiction in which the farm is operating.		N/A			
Ponds	1.1.3	<p><b>Instruction to Clients for Indicator 1.1.3 - Showing Compliance with Water Discharge Regulations</b>                      Indicator 1.1.3 requires the farm to show compliance with all water discharge regulations at the local and national level. If the authoritative regulatory agency has imposed limits on farm water discharge (i.e. by issuing a discharge permit or other comparable mechanism) the obligation shall rest with the client to demonstrate compliance. Four types of evidence are acceptable:</p> <ul style="list-style-type: none"> <li>a. Statement by a fully independent ISO 17025 accredited laboratory showing that their staff collected samples at discharge;</li> <li>b. Results of water testing from a fully independent ISO 17025 accredited laboratory;</li> <li>c. Relevant legal documents showing compliance; or</li> <li>d. Statement from local authorities with competence on water quality and capacity to test water quality parameters stating compliance.</li> </ul> <p>Where regulations require monitoring of farm water discharge, that monitoring shall be conducted annually (at a minimum) or more frequently if required under local or national regulations.                      If there is insufficient evidence to show that the farm complies with water discharge regulations then the auditor will raise a non-conformity.</p> <p>Note 1: The ASC Pangasius Standard also specifies criteria for some water quality parameters. These are considered separately under Principle 3 below.</p>			
		a. Provide a statement by a fully independent ISO 17025 accredited laboratory showing that their staff collected samples at discharge.	N/A		
		b. Provide results of water testing from a fully independent ISO 17025 accredited laboratory.	N/A		
		c. Provide relevant legal documents showing compliance.	N/A		
		d. Provide a statement from local authorities with competence on water quality and capacity to test water quality parameters stating compliance.	N/A		

Applicability	Reference in AM	Description	Timeframe	Check	Remarks
All farms	1.1.4	a. For ponds, maintain copies of land ownership or contract of lease. For pens or cages, maintain permits showing allowance to farm in the designated location.	N/A		
		b. Obtain required permits to use and discharge water for the purposes of operating a farm. Comply with any and all permit restrictions stated therein (e.g. maximum capacity of production, water allocation volumes, etc).	N/A		
		c. If the farm operates in a country and region with no permitting system for land and water use, provide documentary evidence (e.g. letter from authorities) attesting to this fact.	N/A		
All farms	2.1.1	a. Provide a detailed map of the farm with at least 4 GPS coordinates.	N/A		
		b. Provide official plans that identify approved aquaculture development areas. If there are none, obtain a statement from the authorities as confirmation.	N/A		
		c. Provide evidence that the farm is located in an area approved for aquaculture using evidence from maps or list of officially designated locations.	N/A		
Ponds established after August 31, 2010	2.2.1	a. Provide a declaration that identifies the month and year of farm construction, and specify dates of any subsequent farm expansions.	N/A		
		b. Provide a statement/historical land use map from a government organization indicating that the land was agriculture or aquaculture land for 10 years prior to their construction only if the farm (or any of its expansions) was constructed after August 31, 2010.	N/A		
All farms	2.2.2	a. Provide a signed letter to the ASC committing to pay a contribution to the fund for all certified fish harvested from the day of first certification.	N/A		
		b. Retain the receipt from ASC showing that farm's signed letter was received.	N/A		
		c. Retain evidence of all payments made into the fund.	N/A		
Ponds established after August 31, 2010	2.2.3	a. Provide a declaration stating that the farm has not discharged earth into common water bodies after August 31, 2010.	N/A		
		b. Provide a statement indicating where the earth was moved to or how it was disposed of. Only for construction activities listed in 2.2.1a that involved earth moving and that occurred after August 31, 2010.	N/A		
All farms	2.2.4	a. Perform a search of published and grey (e.g. local newspapers, magazines) literature to identify endangered species that occur in the area.	N/A		
		b. Determine whether any species occurring in the area are listed as endangered by relevant national authorities.	N/A		
		c. Provide a list of all endangered species occurring in the area by combining results from 2.2.4(a) and 2.2.4(b) with results from the IUCN database search (see 6.6.2).	N/A		
		d. Provide written procedures describing how the farm avoids negative impacts to endangered species that may occur on the farm.	N/A		
Pens and Cages	2.3.1	a. Provide community testimonials or similar evidence to show the farm does not impede navigation, aquatic animals or water movement.	N/A		
Cages	2.3.2	a. Provide a map or diagram showing measurements of cages and width of the water body.	N/A		
		b. Provide measurements and calculations sufficient to show compliance (see Diagram 1 from Annex C of the ASC Pangasius Standard).	N/A		
Pens	2.3.3	a. Provide a map or diagram showing measurements of pens and width of the water body.	N/A		
		b. Provide measurements and calculations sufficient to show compliance (see Diagram 2 from Annex C of the ASC Pangasius Standard).	N/A		
	2.3.4	a. Provide a map or diagram showing the size and number of pens, and showing the shoreline distance between pens.	N/A		
		b. On the map, show how the arrangement of pens complies with the requirement for number and separation distance (see Diagram 3, Annex C).	N/A		

Applicability	Reference in AM	Description	Timeframe	Check	Remarks
Ponds	2.4.1	a. Maintain records of water intake. For first audits, records must cover at least 1 full crop per site (see preamble).	1 production cycle per site before first audit		
		b. Provide a statement from local authorities indicating the water allocation limits (units given) for the farm. If local authorities do not set water allocation limits for farms operating in the region, obtain a statement from local authorities attesting to this fact.	N/A		
		c. Provide a statement from a reputable independent institution (see Footnote [17]) indicating the water allocation limits (units given) for the farm. Only if water allocation limits are not set by local authorities (see 2.4.1b).	N/A		
		d. Demonstrate the reputability of the authority/institution identified in 2.4.1(b) by providing peer reviewed articles and/or reports on water allocation (if applicable).	N/A		
		e. Calculate the farm's water intake on a crop-by-crop basis to show compliance with water allocation limits.	N/A		
Footnote [17]		A reputable independent institution can be a government organization, an academic institution or an organization that is not linked specifically to the aquaculture sector, but has generated water use parameters for the region, or is responsible for water allocation. Reputability of the institution shall be demonstrated by the farmer showing peer reviewed articles and/or reports on water allocation. Documents produced for a sector other than aquaculture are also acceptable. A track record of at least three years of operation must be available.			
Ponds	2.4.2	<b>Instruction to Clients for Indicator 2.4.2 - Calculating the Ratio of Total Water Abstracted per Ton of Fish Produced</b> Annex D of the ASC Pangasius Standard provides a formula for calculating "Q" which is the ratio of total water abstracted per ton of fish produced. Farms must perform these calculations using harvest data from individual ponds (i.e. it is done on a crop-by-crop basis) and then using those results to determine a farm-wide average across all ponds. Calculations can be done as described here. For the first pond: - compute the total volume of water abstracted ("TEV") in cubic meters (m <sup>3</sup> ) during the production cycle; - compute the total weight of fish produced ("A") in metric tons at harvest time; and - calculate Q for the first pond using the equation: $Q = TEV / A$ Repeat the calculations for the second pond, third pond... etc. until Q has been determined for each pond that was harvested. Use the Q values from each pond (Q <sub>1</sub> , Q <sub>2</sub> , Q <sub>3</sub> ...Q <sub>n</sub> ) to compute the farm-wide average, or Q <sub>avg</sub> .			
		a. Calculate total water abstracted (m3) for each pond harvested by the farm, using records of water intake (see 2.4.1a). For first audits, records must cover at least 1 full crop per site (see preamble).	1 production cycle per site before first audit		
		b. Provide records showing amount of fish harvested from each pond.	N/A		
		c. Calculate the total weight of fish produced (in metric tons) from each pond.	N/A		
		d. Calculate the ratio of total water abstracted per ton of fish produced (see above Instructions and Annex D of the ASC Pangasius Standard as an example) from each pond.	N/A		
e. Calculate the farm-wide average ratio of total water abstracted per ton of fish produced (see Instructions above), using results from all harvested ponds.	N/A				
Pens and Cages	3.1.1	<b>Instruction to Clients for Indicators 3.1.1 and 3.1.2 - Laboratory Analysis of TP and TN in Feed</b> In order to demonstrate compliance with Indicator 3.1.1 and 3.1.2, farms must be able to establish the amount of total phosphorus (TP) and total nitrogen (TN) in feeds. Farms shall obtain from each of their feed suppliers a declaration stating the maximum TP and TN content. Farms shall then verify supplier declarations by testing a representative number of batches (e.g. 1 sample for every 1,000 tonnes of a feed used) for TP and TN content. Tests shall be performed by a fully independent laboratory that is accredited to perform these analyses in accordance with ISO 17025. Results should show that declarations made by the feed supplier are accurate and that the feed is within the limits stated in the declaration. Farms must demonstrate compliance for all feeds used in the crops that are included in the calculation, regardless of whether those feeds were farm-made or commercially sourced. All calculations should be made on a crop-by-crop basis.  <b>Note 1:</b> For first audits, farms are not required to check the TP and TN content of feeds using an independent laboratory. <b>Note 2:</b> Feed refers to all feeds or feed items, regardless of where or how they are produced, and applies to all farms seeking certification.			
		a. Maintain records showing the type of feed and the amount used. This requirement applies to all feed used in the crops that are included in the calculation. For first audits, records must cover at least 1 full crop per site (see preamble).	1 production cycle per site before first audit		
		b. Provide relevant declarations of TP content from feed suppliers for all feed used in the crops included in the calculation. For first audits, records must cover at least 1 full crop per site (see preamble).	1 production cycle per site before first audit		
		c. Provide evidence that the farm tested TP from a representative sample of feeds (see instructions) to verify that declarations from the feed supplier are accurate and that the feed is within limits stated in declarations (see Instructions above).	N/A		



Applicability	Reference in AM	Description	Timeframe	Check	Remarks	
Pens and Cages	3.1.1	d. Calculate the amount of TP in kilograms (kg) added to each enclosure using the results of 3.1.1a and 3.1.1b. For first audits, records must cover at least 1 full crop per site (see preamble).	1 production cycle per site before first audit			
		e. Calculate the amount of TP added as feed per metric ton of fish produced, using total weight of fish produced (answer from 2.4.2c). For first audits, records must cover at least 1 full crop per site (see preamble).	1 production cycle per site before first audit			
	3.1.2	<b>Note:</b> see instructions for Indicator 3.1.1.				
		a. Maintain records showing the type of feed and the amount used. This requirement applies to all feed used in the crops that are included in the calculation. For first audits, records must cover at least 1 full crop per site (see preamble).	1 production cycle per site before first audit			
		b. Provide relevant declarations of TN content from feed suppliers for all feed used in the crops included in the calculation. For first audits, records must cover at least 1 full crop per site (see preamble).	1 production cycle per site before first audit			
		c. Provide evidence that the farm tested TN from a representative sample of feeds (see instructions) to verify that declarations from the feed supplier are accurate and that the feed is within limits stated in declarations (as applicable).	N/A			
Pens and Cages	3.1.2	d. Calculate the amount of TN in kilograms (kg) added to each enclosure, using the results of 3.1.2a and 3.1.2b. For first audits, records must cover at least 1 full crop per site (see preamble).	1 production cycle per site before first audit			
		e. Calculate the amount of TP added as feed per metric ton of fish produced, using total weight of fish produced (answer from 2.4.2c). For first audits, records must cover at least 1 full crop per site (see preamble).	1 production cycle per site before first audit			
Ponds	<p><b>Instruction to Clients for Indicator 3.1.3 and 3.1.4 - Sampling and Laboratory Analysis of TP and TN Discharged</b>  Determination of the concentration of total phosphorus (TP) in water samples shall be made using the method: Kejdahl and Indo-phenol Blue. Determination of the concentration of total nitrogen (TN) in water samples shall be made using the method: Kejdahl and Ascorbic acid. Determinations will be made by a fully independent laboratory that is accredited to perform these analyses in accordance with ISO 17025. Farms will measure the amount of TP and TN discharged from a minimum of 1 pond in production; at least one of these ponds shall be randomly selected. The farm must record the number and identity of selected ponds before sampling. Required procedures for collecting water samples are as follows:</p> <ul style="list-style-type: none"> <li>- two water samples are taken: one from the pond (=pond water) and one from the intake (=intake water). The two samples are taken on the same day.</li> <li>- all water sample collections are done following the methodology provided by a fully independent ISO 17025 accredited laboratory and will be available to the certifier at the day of the audit. The accredited laboratory will be required to verify that sampling was conducted in accordance with this methodology.</li> <li>- all water samples are collected in second half of crop production (i.e. ≥ 90 days after stocking)</li> <li>- pond water samples are collected at 50% of pond depth</li> <li>- all water samples are collected before 11:00am</li> <li>- pond water samples are collected &gt; 6 hours after the intake of water into the pond</li> </ul> <p><b>For first audits farm records for monitoring TP and TN discharged must cover ≥ 6 months.</b>  <b>To prepare for first audit:</b></p> <ul style="list-style-type: none"> <li>- farm invites accredited laboratory to the farm to have the water sampled</li> <li>- if samples are out of compliance, farm takes corrective actions prior to ASC audit</li> <li>- in case of non-compliances, farm does have the water sampled by accredited labatory after implementation of corrective actions to show compliance</li> <li>- all sampling results are supplied to auditor by the accredited laboratory to show that corrective action has been taken and that farms is now in compliance with the ASC Standard</li> </ul>					
	3.1.3	a. Perform the name and relevant qualifications/accreditations of the independent laboratory that is used to perform water quality monitoring and a copy of the contract specifying that water sampling and analyses are to be conducted in line with instructions for 3.1.3.	N/A			
		b. Provide laboratory results for TP concentration in pond water samples and intake water samples.	N/A			
		c. Provide the total weight of fish produced (result from 2.4.2b), and the total volume of water discharged for each pond (answer from 2.4.1) during the crop production cycle.	N/A			
		d. Calculate the amount of TP discharged per metric ton of fish produced per pond. By using the values from b and c (above) into the Total TP Discharge Formula (Annex D of the ASC Pangasius Standard). Repeat for each pond that was sampled.	N/A			
		e. Calculate the farm-wide average amount of TP discharged per metric ton of fish produced, using the TP values (answer d) from different ponds.	N/A			

Applicability	Reference in AM	Description	Timeframe	Check	Remarks
Ponds	3.1.4	<b>Note:</b> see instructions for Indicator 3.1.3			
		a. Provide the name and relevant qualifications/accreditations of the independent laboratory that is used to perform water quality monitoring.	N/A		
		b. Provide laboratory results for TN concentration in pond water samples and intake water samples.	N/A		
		c. Provide the total weight of fish produced (answer from 2.4.2c), and the total volume of water discharged (answer from 2.4.1) for each pond, during the crop production cycle.	N/A		
		d. Calculate amount of TN discharged per metric ton of fish produced per pond. By using the values from b and c (above) into the Total TN discharge Formula (Annex D of the ASC Pangasius Standard). Repeat for each pond that was sampled.	N/A		
		e. Calculate the farm-wide average amount of TP discharged per metric ton of fish produced, using the TN values (answer d) from different ponds.	N/A		
All farms	3.2.1	<b>Instruction to Clients for Indicator 3.2.1 - Measuring Percent Change in Diurnal Dissolved Oxygen</b> Farms shall monitor the percent change in diurnal dissolved oxygen in receiving waters. Dissolved oxygen (DO) concentration is reported relative to DO at saturation for the water's specific salinity, temperature and altitude. DO is measured using a hand-held oxygen meter or a more accurate (chemical) method, with accuracy established in peer-reviewed documents. The location of measurements should be the first natural receiving water body and as close as practical to the point of discharge but at a distance not exceeding 200m from the point of discharge. In addition, the following procedures are followed: - DO monitoring is conducted fortnightly (i.e. once every two weeks) - On each sampling day, two DO measurements are taken: at 1 hour before sunrise and at 2 hours before sunset (+/- 30 min). - DO measurements are taken at 0.3 meters below the water surface. - Temperature and salinity is recorded at the same time that DO is measured.  <b>Note 1:</b> An exemption to Indicator 3.2.1 is made for farms that have "cleaner" water (i.e. where the value of the farm TP and TN is lower than that of the intake water. This applies regardless of whether the receiving water is eutrophic. See Indicators 3.3.1 and 3.3.2 for more information about measuring differences in TN and TP between pond inlet and outlet.			
		a. Provide DO measurements.	N/A		
		b. Perform calibration of all equipment at the frequency and by the method recommended by the manufacturer. Temperature, salinity and altitude are to be adjusted for in calibration or calculations.	N/A		
		c. Calculate percent change in DDO for each monitoring date using the equation in Annex D.	N/A		
		d. Calculate the average percent change in DDO over the entire 12-month monitoring period using the results of 3.2.1c. For first audits, farm records must cover ≥ 6 months.	≥ 6 months before first audit		
		e. Perform DO measurements while the auditor is at the farm.	N/A		
Ponds	3.3.1	<b>Instruction to Clients on Indicators 3.3.1 and 3.3.2 - Measuring Change in TP and TN Between Inlet and Outlet</b> Determination of the concentration of total phosphorus (TP) in water samples shall be made using the method: Kejdahl and Indo-phenol Blue. Determination of the concentration of total nitrogen (TN) in water samples shall be made using the method: Kejdahl and Ascorbic acid. Determinations will be made by a fully independent laboratory that is accredited to perform these analyses in accordance with ISO 17025. Laboratory results will be accompanied by a statement that indicates compliance to the methodology set in the ASC Pangasius Standard and this Audit Manual. Farms will measure the change in TP and TN from only a subset of the total number of ponds in production: 15% of all ponds (value rounded up to the nearest whole number). At least one of these ponds shall be randomly selected. The farm must record the number and selection of ponds before sampling. Required procedures for collecting water samples are as follows: - samples are collected by staff from the fully independent accredited laboratory; - samples are taken from the 'inlet' and the 'outlet' (inlet = the water in the intake canal, as close as possible to the farm being certified. Outlet = the actual water being discharged, not the receiving water. For farms using a water treatment system this could be the water in the final part of the treatment system before being discharged); - samples are collected from pond inlets and outlets during the second half of crop production (i.e. ≥ 90 days after stocking); - on each sampling day, at least two samples are collected from the outlet and these are taken at least 1 hour apart (use the average value in calculations below); and - at a minimum the farm must sample from one pond per year.  Percent Change in TP = (Outlet TP Conc.) - (Inlet TP Conc.) / (Inlet TP Conc.) x 100  Percent Change in TN = (Outlet TN Conc.) - (Inlet TN Conc.) / (Inlet TN Conc.) x 100  When more than one pond is sampled, determine a "farm-wide average" by calculating the average percent change for all sampled ponds.  For first audits, farm records for monitoring percent change in TP and TN must cover ≥ 6 months.			
		a. Provide laboratory results for TP in water samples from inlet and outlet.	N/A		

Applicability	Reference in AM	Description	Timeframe	Check	Remarks	
Ponds	3.3.1	b. Calculate the percent change of TP between inlet and outlet on each sampling day using the equation shown above, for each pond.	N/A			
		c. Calculate the average percent change in TP over the entire monitoring period, using results of 3.3.1(b).	N/A			
		d. Provide evidence of the on-site visit for the sampling of pond effluents for TP and TN by staff from the accredited laboratory.	N/A			
	3.3.2	<b>Note: see instructions for Indicator 3.3.1</b>				
		a. Provide laboratory results for TN in water samples from inlet and outlets.	N/A			
		b. Calculate the percent change of TN between inlet and outlet on each sampling day for each pond, using the equation shown above.	N/A			
		c. Calculate the average percent change in TN over the entire monitoring period, using the results of 3.3.2(b).	N/A			
		d. Perform the auditor to observe sampling of pond effluents for TP and TN.	N/A			
Ponds	3.3.3	<b>Instruction to Clients for Indicator 3.3.3 - Measuring DO in Water Discharged</b> See Indicator 3.2.1 for a general description of the equipment and method used to measure dissolved oxygen (DO). Take DO measurements at the outlet where water is discharged (i.e. measure DO in the actual water being discharged, not in the receiving water. For farms using a water treatment system this could be the water in the final part of the treatment system before being discharged). Test DO at least once per week.				
		a. Provide records of DO in water discharged to the natural environment. For first audits, farm records must cover ≥ 6 months.	≥ 6 months before first audit			
		b. Calculate the average DO in water discharged over the entire monitoring period using data from all weekly measurements. For first audits, farm records must cover ≥ 3 months.	≥ 3 months before first audit			
		c. Perform the auditor to observe calibration of equipment and measurements.	N/A			
All farms	3.4.1	a. Provide a detailed sludge management plan (also see 3.5.1). The plan will ensure that no sludge in any form is discharged directly into receiving waters or natural ecosystems.	N/A			
		b. Maintain records of sludge disposal to show volume or weight and condition (i.e. fresh or dried) when disposed. For first audits, farm records must cover ≥ 3 months.	≥ 3 months before first audit			
		c. Provide a declaration from the receiving party that specifies the sludge volume, delivery date, and expected use, if the sludge is transferred (e.g. for agricultural use). The party shall declare that the sludge will not be discharged directly into receiving waters or natural ecosystems.	N/A			
		d. Provide a map showing its location within the farm or documents showing legal access to the repository (either ownership or a statement from the owner of right of use), if a sludge repository is used.	N/A			
Farms managing the sludge using a repository	3.4.2	<b>Instruction to Clients for Indicator 3.4.2 - Size of Sludge Repository</b> A Sludge Repository Formula is given in Annex D of the ASC Pangasius Standard. Farms shall document how this formula was used to calculate the appropriate size (minimum volume) of a sludge repository. Farms may, for example, document their calculations in the sludge management plan (see 3.4.1a). All sludge areas and volumes must be considered in the calculation. For 'Area of Pond', consider only the area of the pond from which sludge has to be removed over the following 2 months.  <b>Note 1:</b> If the Sludge Repository Formula yields a negative number then the repository exceeds the minimum volume (i.e. it is an appropriate size).				
		a. Provide calculations showing the sludge repository is of appropriate size.	N/A			
		b. Provide evidence of legal access to the sludge repository (see 3.4.1c).	N/A			
All farms	3.5.1	a. Provide a plan for farm solid waste management. The plan may encompass other forms of farm-generated wastes (see 3.4.1, 3.5.2, 3.5.3, and 3.5.4).	N/A			
		b. Perform the auditor to inspect the farm's solid waste management system.	N/A			
	3.5.2	a. Provide the auditor a general description of the farm's system for removal of human and animal solid waste. Allow the auditor to inspect.	N/A			
		b. Provide a schedule for emptying and maintenance (see 3.5.4c), for septic systems.	N/A			
		c. Provide the auditor with locations of all septic toilets and a schedule for their emptying and maintenance.	N/A			
All farms	3.5.2	d. Provide evidence for burial of animal feces (as applicable).	N/A			
		e. Identify septic toilets in construction contracts if possible.	N/A			



Applicability	Reference in AM	Description	Timeframe	Check	Remarks	
All farms	3.5.3	a. Provide a plan for farm management of chemical and medicine wastes.	N/A			
		b. Allow the auditor to inspect the farm's management of chemical and medicinal wastes.	N/A			
	3.5.4	<b>Instruction to Clients for Indicator 3.5.4 - Preparing a Plan for Disposal of Dead/Moribund Fish</b> Prepare a plan for the proper disposal of dead/moribund fish that specifies the means of disposal using one or more of the following categories: incineration (excluding regular burning, as not allowed); burial; fermentation and use as fertilizer; septic tank; production of fish meal or fish oil; feed for animals other than pangasius (requires statement from aquatic animal health specialist, see Principle 6); sold.  Dead fish should never be used for human consumption unless specifically slaughtered and processed for that purpose in an appropriate facility.				
		a. Provide auditor with the farm's plan for disposal of dead/moribund fish.	N/A			
		b. Provide a plan identifies processes, location(s) and containers for burial, incineration, fermentation.	N/A			
		c. Provide a plan for the <u>septic tank</u> . This plan gives procedures for disposal of fish in septic tanks, specifies the schedule for emptying tanks, and identifies personnel involved (e.g. contracts with external parties).	N/A			
		d. Provide a specified plan on the <u>production of fish meal or fish oil</u> . Note that this option is allowed only if aquatic animal health specialist rules out pesticides.	N/A			
		e. Provide a plan on <u>feed for animals other than pangasius (excluding fish meal and fish oil as covered in "d")</u> . Option is allowed only if an aquatic animal health specialist concludes that mortality was not caused by an infectious agent or a pesticide/chemical pollutant.	N/A			
f. Provide a plan on <u>sold</u> that identifies the option of sales. For all sales, the farm must prepare a contract that states how the buyer will use the dead fish. If intended as animal feed (either directly or as fish meal/oil) the contract and the statement of the specialist confirm compliance with requirements.	N/A					
All farms	3.6.1	a. Maintain records (e.g. receipts) of farm energy consumption. Compute the quantity of fuel and electricity used by the farm in the last 12 months. For first audits, farm records must cover ≥ 6 months.	≥ 6 months before first audit			
		b. Provide records of mortality quantities (see Indicator 6.4.4) and their disposal method (see Indicator 3.5.4). For first audits, farm records must cover at least 1 full crop per site (see preamble).	1 production cycle per site before first audit			
Farms in a river basin where the species is either indigenous or has a self-recruiting stock established	4.1.1	<b>Note:</b> If the farmed species is not indigenous to the river basin and the species does not have a self-recruiting stock established, then Indicator 4.1.1. does not apply. Enter 'not applicable' here and proceed to assess farm compliance against Indicator 4.1.3.				
		a. Provide a declaration from farm and seed supplier identifying the species (Latin name) of pangasius farmed. Maintain records of seed purchases.	N/A			
		b. Provide a map of the river basin showing the location of the farm (see 2.1.1).	N/A			
		c. Provide documentary evidence (peer-reviewed papers, IUCN, FAO or other international organization), if the farmed species is indigenous to the river basin.	N/A			
	d. Provide documentary evidence (peer-reviewed papers, official government [competent authority] statements or other comparable references on multiple incidences of different age classes at different times and location) indicating that the stock was self recruiting before 1st January 2005, if the species is not indigenous and has a self-recruiting stock established in the river basin.	N/A				
	4.1.2	a. Provide documentary evidence: peer-reviewed papers, official government (competent authority) statements or other comparable references indicating no negative impacts.  Negative impact by a self-recruiting stock includes but is not restricted to: - changing the genetic diversity of wild pangasius through interbreeding, - competition (e.g. displacement of local species), - habitat destruction.	N/A			
4.1.3	a. Provide peer-reviewed papers based on field data. Theoretical analysis is not acceptable.	N/A				

Applicability	Reference in AM	Description	Timeframe	Check	Remarks
Farms in a river basin where the species is either indigenous or has a self-recruiting stock established	4.2.1	a. Obtain evidence for either of the following: - the species is indigenous to the river basin (result from 4.1.1); or - a self recruiting stock has established in the river basin (result from 4.1.2).	N/A		
		b. Provide a map of the river basin showing the location of the farm (see 2.1.1).	N/A		
		c. Obtain a declaration from seed supplier(s) stating that the seed was generated from broodstock deriving (even if through several generations of spawning in captivity) from the pangasius population naturally reproducing in the river basin.	N/A		
		d. Maintain sufficient records, for all seed purchases, (e.g. receipts) to indentify the river-basin source of broodstock. For first audits, farm records must cover ≥ 6 months.	≥ 6 months before first audit		
All farms	4.3.1	a. Provide a declaration that the farm does not use wild-caught seed for grow out.	N/A		
		b. Obtain statement from seed supplier(s) that the seed is not wild-caught (e.g. seed is derived from a broodstock held in captivity).	N/A		
		c. Maintain seed receipts for all stocking events. For first audits, farm records must cover ≥ 6 months.	≥ 6 months before first audit		
All farms	4.4.1	a. Provide a declaration that the farm does not use genetically engineered (transgenic) or hybrid seed.	N/A		
		b. Obtain statement from seed supplier that the seed is not genetically engineered (transgenic) or hybrid. For first audits, farm records must cover ≥ 6 months.	≥ 6 months before first audit		
All farms	4.5.1	a. Provide farm records indicating fish sizes (e.g. average weight recorded monthly). For first audits, records must cover at least 1 full crop per site (see preamble).	1 production cycle per site before first audit		
		b. Maintain records indicating the size of net mesh or grills for the entire farm. For first audits, farm records must cover ≥ 6 months.	≥ 6 months before first audit		
	4.5.2	a. Provide farm records for daily inspection of net mesh or grills used in production (e.g. grow-out) units.	N/A		
		b. Keep records of mitigation and repairs in a permanent register. For first audits, records must cover at least 1 full crop per site (see preamble).	1 production cycle per site before first audit		
		c. Arrange for the auditor to observe an inspection during the on-site visit.	N/A		
	Ponds	4.5.3	a. Provide official records or statement showing local maximum water level (river levels, tide levels, flooding levels, etc) in the previous 10 years.	≥ previous 10 years	
b. Obtain a statement from local authorities or reputable organisation reporting the altitude (m above sealevel) of the bund in its lowest point. Show location of bund low-point on a map of the farm (see 2.1.1).			N/A		
c. Provide a written statement that there were no incidents of significant spillage or escapement due to flooding in the last 12 months.			≥ 12 months before first audit		
All farms	4.5.4	a. Identify the quantity and location of all trapping devices. The term 'trapping device' does not include mesh or grid barriers (see 4.5.1).	N/A		
		b. Maintain a record of regular (at least weekly) trap inspections and observed escapees.	N/A		
		c. When escapees are detected, record any actions taken to reduce or eliminate escapement. For first audits, these records must cover at least 1 full crop per site (see preamble).	1 production cycle per site before first audit		
All farms	4.6.1	a. Provide a procedure for the monitoring and repair of damaged bunds.	N/A		
		b. Maintain a record of bund monitoring and repair that identifies date of damage detection and when the farm initiated and completed repairs.	N/A		
		c. Arrange for the auditor to inspect farm's bunds, during the on-site visit.	N/A		



Applicability	Reference in AM	Description	Timeframe	Check	Remarks	
All farms	4.6.2	a. Provide a declaration that the farm has made no intentional releases in the last 12 months.	≥ 12 months before first audit			
		b. Maintain records and receipts to show that all crops stocked have been harvested and sold (see 2.4.2 and 5.2.1) or properly disposed (see 3.5.4). For first audits, records must cover at least 1 full crop per site (see preamble).	1 production cycle per site before first audit			
		c. Prepare a written justification for any periods of inactivity lasting longer than 3 months. For first audits, records must cover at least 1 full crop per site (see preamble).	1 production cycle per site before first audit			
All farms	5.1.1	a. Maintain records (e.g. receipts) for all purchases of commercial feed in the last 12 months. For first audits, farm records must cover ≥ 6 months.	≥ 6 months before first audit			
		b. Provide a description of ingredients and preparations, if any farm-made feed was use. Maintain evidence of purchase (e.g. receipts) or ownership of all ingredients. For first audits, farm records must cover ≥ 6 months.	≥ 6 months before first audit			
	5.1.2	a. Provide a declaration that no by-products of pangasius fish processing were used as feed for pangasius at any time during the last 12 months.	≥ 12 months before first audit			
		b. Obtain a declaration from the manufacturer showing compliance, for all feed used in the last 12 months. For first audits, farm records must cover ≥ 6 months and all the feed requirements apply only to fish on site.	≥ 6 months before first audit			
		c. Provide a declaration that no pangasius by-products were used as feed ingredients, if farm-made feed was used in the last 12 months. And obtain a statement from the respective supplier confirming compliance, if fish meal or fish oil was used. For first audits, farm records must cover ≥ 6 months.	≥ 6 months before first audit			
	5.1.3	<p><b>Instructions to Clients for Indicator 5.1.3 - Confirm there are no IUCN Red List Species in Feed</b></p> <p>For the purposes of this Indicator, the ASC definition of 'fish products' shall encompass all wild-capture marine resources, including finfish and invertebrate species (e.g. shrimp, crab, squid). Farms must be aware that feeds which contain any IUCN Red Listed species do not comply with the Standard. This restriction extends to feeds that use by-products (e.g. trimming) or aquacultured products of IUCN Red Listed species.</p> <p>For each fish product used as a feed ingredient, determine whether the species is on the IUCN Red List as follows:</p> <ul style="list-style-type: none"> <li>- go to <a href="http://www.iucnredlist.org/">http://www.iucnredlist.org/</a></li> <li>- in the primary search field enter the genus and species</li> <li>- click on "run search" and record the status of the species.</li> </ul> <p>Note: The IUCN Red List uses nine categories for ranking species according to threat, and search results may include species that are not currently threatened. For the purposes of determining whether the feed complies with Indicator 5.1.3, consider only species identified as "Vulnerable", "Endangered", or "Critically Endangered". Species that are listed in other IUCN categories (e.g. "Not evaluated", "Data Deficient", and "Least Concern") may be excluded from further analyses.</p>				
		a. Obtain a statement from feed manufacturer identifying the origin of all fish products used as feed ingredients (to specify genus, species and region of harvest). For first audits, farm records must cover ≥ 6 months and all the feed requirements apply only to fish on site.	≥ 6 months before first audit			
		b. Verify that none of the species identified in 5.1.3(a) are in "threatened categories" on the IUCN Red List of Threatened Species.	N/A			
		c. If farm-made feed was used, verify that no species are in "threatened categories" on the IUCN Red List. If fish meal or fish oil were used, obtain a statement from the respective supplier confirming compliance.	N/A			
		5.1.4	a. Obtain a statement from feed manufacturer identifying the origin of all fish products used as feed ingredients (to specify genus, species and region of harvest). [See Indicator 5.1.5 about sourcing of trimmings and aquacultured products as feed ingredients]. For first audits, farm records must cover ≥ 6 months and all the feed requirements apply only to fish on site.	≥ 6 months before first audit		
	b. Determine if any species identified in 5.1.4(a) is listed in CITES appendix I, II, or III by doing the following:		N/A			
	- go to <a href="http://www.speciesplus.net">http://www.speciesplus.net</a> - select option "Species", enter genus and species, and click "find it".		N/A			
c. Verify that no species are listed in CITES Appendix I, II or III, if farm-made feed was used. And obtain a statement from the respective supplier confirming compliance, if fish meal or fish oil were used.	N/A					

Applicability	Reference in AM	Description	Timeframe	Check	Remarks
All, after 3 years of ISEAL-certified fishmeal and fish oil becoming available in the region of production. Not applicable if only trimming and aquaculture products are used	5.1.5	<p><b>Note 1:</b> "becoming available in a region" means being commercially available in the region (UN regions) by at least two independent suppliers and indicated in grey literature (the date of appearing in grey literature is to be used).</p> <p><b>Note 2:</b> "products" does not apply to trimmings and aquacultured products used as feed ingredients (see Indicator 5.1.3).</p>			
		a. Obtain a statement from feed manufacturer identifying the origin of all fish products used as feed ingredients (to specify genus, species and region of harvest). For first audits, farm records must cover ≥ 6 months and all the feed requirements apply only to fish on site.	≥ 6 months before first audit		
		b. Provide evidence that fish meal and fish oil products used in feed are from sources certified as compliant to the standards of an ISEAL member.	N/A		
All, after August 2015. Not applicable if only trimming and aquaculture products are used Applicability: Up to when standard 5.1.5 or 5.1.6 can be met. Not applicable if only trimming and aquaculture products are used	5.1.6	a. Obtain statement from feed manufacturer as for Indicator 5.1.5. For first audits, farm records must cover ≥ 6 months and all the feed requirements apply only to fish on site.	≥ 6 months before first audit		
		b. Provide evidence of certified fish feed ingredients as for Indicator 5.1.5.	N/A		
Up to when standard 5.1.5 or 5.1.6 can be met. Not applicable if only trimming and aquaculture products are used	5.1.7	<p><b>Instruction to Clients for Indicator 5.1.7 - FishSource Score of Products Used in Feed</b> To determine FishSource scores of fish species used as feed ingredients, do the following:</p> <ul style="list-style-type: none"> <li>- go to <a href="http://www.fishsource.org/">http://www.fishsource.org/</a></li> <li>- select "Species" drop down tab to the left</li> <li>- select the species that is utilized by the farm as a source of fish meal or oil</li> <li>- confirm that the search identifies the correct species, then select the top tab that reads "Scores"</li> <li>- Review scores to verify average FS scores ≥ 6.0; no individual score &lt; 6.0, and no "N/A" for "Stock Assessment" category (category 4 in FishSource scoring).</li> </ul> <p>If results show the species does not meet all three of the above criteria, then the feed does not meet requirements of the ASC Pangasius Standard. If the species has not been assessed (i.e. it is not listed on the FishSource website), then the feed does not meet requirements of the Standard. Contact FishSource via Sustainable Fisheries Partnerships to identify the species as a priority for assessment.</p>			
		a. Obtain statement from feed manufacturer as for Indicator 5.1.5. For first audits, farm records must cover ≥ 6 months and all the feed requirements apply only to fish on site.	≥ 6 months before first audit		
		b. Provide an FS score or verification of IFFO certification for each species used as a feed ingredient in all feeds used by the farm during the last 12 months. For first audits, farm records must cover ≥ 6 months and all the feed requirements apply only to fish on site.	≥ 6 months before first audit		
All farms	5.2.1	a. Obtain receipts and/or statements from seed supplier indicating average weight of seed and numbers. For first audits, farm records must cover ≥ 6 months and records must cover at least 1 full crop per site (see preamble).	≥ 6 months and 1 full crop before first audit		
		b. Maintain records showing the type of feed and the total amount used (see 3.1.1a).	N/A		
		c. Maintain records (e.g. receipts) showing amount of fish harvested (see 2.4.2b). For first audits, records must cover at least 1 full crop per site (see preamble).	1 production cycle per site before first audit		
		d. Calculate eFCR and yield for each crop harvested during the last 12 months using the formulas given in Annex D of the Pangasius Standard. For first audits, records must cover at least 1 full crop per site (see preamble).	1 production cycle per site before first audit		
	e. Calculate maximum weighted average eFCR for the complete production cycle using the formula given in Annex D of the Pangasius Standard.	N/A			
	5.2.2	a. Obtain statement(s) from feed manufacturer indicating the maximum inclusion percentage of fish meal and fish oil in each type of feed used. For first audits, farm records must cover ≥ 6 months.	≥ 6 months before first audit		
b. Calculate the FFER using the formula given in Annex D of the Pangasius Standard. By-products from fish processing of species other than pangasius but not on the IUCN Red List or CITES lists can be used and not be factored in as "fish meal or oil" for this calculation.		N/A			

Applicability	Reference in AM	Description	Timeframe	Check	Remarks
All farms	6.1.1	<p><b>Instructions to Clients for Indicator 6.1.1 - Calculating Average Real Percentage Mortality (RPM)</b></p> <p>Calculate the weighted average of Real Percentage Mortality using the stocking &amp; harvesting data from every enclosure used by the farm in the last 12 months. Do one calculation per enclosure as follows:</p> <p>1) Determine the number of fish stocked. This number may be obtained from</p> <ul style="list-style-type: none"> <li>- direct counts of fingerlings, or</li> <li>- computed by taking the total weight of stocked fish and dividing by the average weight of the fish stocked</li> </ul> <p>2) Determine the number of fish harvested. This number may be obtained from</p> <ul style="list-style-type: none"> <li>- direct counts of harvested fish, or</li> <li>- computed by taking the total weight of harvested fish and dividing by average weight of the fish harvested</li> </ul> <p>3) Using the formula in Annex D, compute the Real Percentage Mortality for the enclosure (Note 1).</p> <p>4) Repeat steps 1-3 for every other enclosure used by the farm.</p> <p>5) Compute the weighted average RPM for all enclosures over the last 12 months as follows</p> $\text{Weighted Average RPM} = [ (\text{RPME1} \times \text{YieldE1}) + (\text{RPME2} \times \text{YieldE2}) \dots + (\text{RPME}_n \times \text{YieldE}_n) ] / (\text{YieldE1} + \text{YieldE2} \dots + \text{YieldE}_n)$ <p>Where E1, E2, En are the 1st enclosure, the 2nd enclosure and the nth enclosure</p> <p>For first audits, records must cover at least 1 full crop per site (see preamble).</p> <p><b>Note 1:</b> Only use counts of live fish in these calculations. Do not include counts of dead fish when determining number of harvested fish or number of stocked fish.</p> <p><b>Note 2:</b> Only use information from complete crops.</p>			
		a. Obtain receipts and/or statements from seed supplier indicating average weight of seed and numbers (see 5.2.1a). Maintain records to show the total number of fish stocked into each enclosure during the last 12 months. For first audits, farm records must cover ≥ 6 months and records must cover at least 1 full crop per site (see preamble).	≥ 6 months and 1 full crop		
		b. Maintain harvest records for each crop (e.g. selling receipts or processing plant receipts) that are sufficient to show the total number of fish harvested from each enclosure. For first audits, records must cover at least 1 full crop per site (see preamble).	1 production cycle per site before first audit		
		c. Calculate the weighted average of the Real Percentage Mortality (see above) using the formula given in Annex D of the Pangasius Standard. Provide calculations to the auditor.	N/A		
All farms	6.2.1	a. Provide a list of all veterinary medicines, chemicals and biological products used on the farm in the past 12 months. For first audits, records must cover at least 1 full crop per site (see preamble).	1 production cycle per site before first audit		
		b. Provide records detailing the use of any veterinary medicines, chemicals and biological products on the farm in the last 12 months. For first audits, records must cover at least 1 full crop per site (see preamble).	1 production cycle per site before first audit		
		c. Identify suppliers and contact information, for the list provided in 6.2.1a.	N/A		
		d. Show that each item is approved for aquaculture by relevant national authorities, for the list provided in 6.2.1a.	N/A		
		e. Provide a list of the farm's exports (i.e. sales to parties in foreign countries) over the last 12 months.	last 12 months		
		f. Provide a list of the top five countries importing pangasius from the country where the farm operates (regions operating within the same legislation on this matter, e.g. the EU, are considered as a single country), if the farm cannot determine the country of export (6.2.1e).	N/A		
		g. Provide a list of veterinary medicines, chemicals and biological products that are banned from imports of pangasius for human consumption, for each country identified in 6.2.1e (or 6.2.1f as applicable).	N/A		
		h. Show that in the last 12 months, the farm did not use any veterinary medicines, chemicals or biological products that are banned or non-approved in the importing country.	last 12 months		
All farms	6.2.2	a. Provide records of prescriptions, or the written advice of a suitably qualified aquatic animal health specialist [55], for veterinary medicines and chemicals used on the farm. For first audits, farm records must cover ≥ 6 months.	≥ 6 months before first audit		
		b. Provide a description of condition and evidence showing endorsement (prescription) from an aquatic animal health specialist, for each application of veterinary medicines and chemicals for therapeutic use. For first audits, farm records must cover ≥ 6 months.	≥ 6 months before first audit		
		c. Obtain written justification from aquatic animal health specialist, if application differs from the label specification. For first audits, farm records must cover ≥ 6 months.	≥ 6 months before first audit		



Applicability	Reference in AM	Description	Timeframe	Check	Remarks
All farms	6.2.2	d. Provide copies of the title(s) of the aquatic animal health specialist showing how s/he is suitably qualified for the position.	N/A		
Footnote [55]		Aquatic animal health specialist defined following government's regulations, if such regulations exist in the producing country. If the government does not regulate on this, the following people can be considered as specialists: <ul style="list-style-type: none"> <li>• Veterinarians with at least three months of academic training on fish health management (for a total of at least 60 hours). This training may be included with the veterinary degree.</li> <li>• Aquaculturists (with university or vocational degree) who have completed at least three months of training on fish pathology and treatment (for a total of at least 60 hours). This training may be included with the university or vocational degree.</li> </ul>			
All farms	6.2.3	a. Provide statements of the specialist indicating his/her recommendation on: <ul style="list-style-type: none"> <li>- how to apply the veterinary medicine and chemicals prescribed;</li> <li>- how to handle &amp; store the veterinary medicine and chemicals prescribed;</li> <li>- who needs to be informed about the disease; and</li> <li>- how to limit the spread of the disease to neighboring wild or farmed populations.</li> </ul> For veterinary medicines or chemicals applied and for all mortality events notified. For first audits, farm records must cover ≥ 6 months.	≥ 6 months before first audit		
		b. Provide a declaration that the farm followed the recommendations of the aquatic animal health specialist.	N/A		
	6.2.4	a. Provide daily records of product use and water temperature during withdrawal periods, for chemical/medicinal treatments in the last 12 months. For first audits, records must cover ≥ 6 months and at least 1 full crop per site (see preamble).	≥ 6 months 1 production cycle per site before first audit		
		b. Provide labels indicating duration of withdrawal periods. If labels do not specify a withdrawal period, provide evidence that withdrawal periods were > 750 degree days.	N/A		
		c. Provide evidence (e.g. receipts) to show no fish were harvested before completion of withdrawal period during the last 12 months. For first audits, farm records must cover ≥ 6 months.	≥ 6 months before first audit		
All farms	6.2.5	a. Maintain a list of all antibiotics used on the farm in the last 12 months. For first audits, records must cover at least 1 full crop per site (see preamble).	1 production cycle per site before first audit		
		b. Provide declaration stating that farm did not use any antibiotics critically important for human medicine as categorized by the WHO in the last 12 months.	last 12 months		
		c. Provide the up-to-date list of the WHO [57].	N/A		
Footnote [57]		Refer to the second WHO Expert meeting on Critically Important Antimicrobials for Human Medicine: Categorization for the Development of Risk Management Strategies to Contain Antimicrobial Resistance due to Non-Human Antimicrobial use, 29–31 May 2007 <a href="http://www.who.int/entity/foodborne_disease/resistance/antimicrobials_human.pdf">http://www.who.int/entity/foodborne_disease/resistance/antimicrobials_human.pdf</a>			
All farms	6.2.6	a. Provide declaration stating that farm does not use any unauthorized prophylactic veterinary medicines (prior to evidence of a specific disease problem).	N/A		
		b. Obtain a declaration from the aquatic animal health specialist indicating that s/he is not aware of any unauthorized prophylactic use of veterinary medicines (prior to evidence of a specific disease problem) by the farm in the last 12 months. For first audits, the period covered by the declaration must be ≥ 6 months.	≥ 6 months before first audit		
		c. Maintain receipts for all purchases of veterinary medicines. For first audits, records must cover at least 1 full crop per site (see preamble).	1 production cycle per site before first audit		
	6.2.7	a. Obtain a declaration from the applicant, endorsed by an aquatic animal health specialist indicating that there has been no use of veterinary medicines (excluding vaccines) as growth promoters by the farm in the last 12 months. For first audits, the period covered by the declaration must be ≥ 6 months.	≥ 6 months before first audit		
All farms	6.3.1	a. Provide the farm's written pangasius health plan containing all required elements (Annex E in the Pangasius Standard).	N/A		
		b. Obtain review and written approval of the pangasius health plan by the farm's aquatic animal health specialist.	N/A		
		c. Review the health plan at least once every 12 months. Update as needed and obtain approval by the farm's aquatic animal health specialist.	once every 12 months		

Applicability	Reference in AM	Description	Timeframe	Check	Remarks	
All farms	6.4.1	a. Maintain records that identify all the veterinary medicines and chemicals used at the grow-out facility. For first audits, farm records must cover $\geq 6$ months.	$\geq 6$ months before first audit			
		b. Maintain copies of labels showing withdrawal times at the grow-out facility. For first audits, records must cover at least 1 full crop per site (see preamble).	1 production cycle per site before first audit			
		c. Maintain signed declarations by the farm's aquatic animal health specialist stating the date, diagnosis, treatment and withdrawal times (if different from the label) of all veterinary medicines and chemical used at the grow-out facility. For first audits, farm records must cover $\geq 6$ months.	$\geq 6$ months before first audit			
		d. Obtain a signed declaration from seed suppliers identifying any chemicals or veterinary medicines that were used in production of seed. For first audits, records must cover at least 1 full crop per site (see preamble).	1 production cycle per site before first audit			
	6.4.2	a. Obtain a signed letter from the seed supplier reporting: <ul style="list-style-type: none"> <li>- the source, size and quality of seed supplied;</li> <li>- the date supplied;</li> <li>- a description of any external signs of abnormalities at the time of sale;</li> <li>- list of veterinary medicines, chemicals and biological products used in earlier life stages (i.e. used at any time from spawning onwards); and</li> <li>- results of pathogen testing following legislation (as applicable).</li> </ul> For all stocking events in the last 12 months. For first audits, farm records must cover $\geq 6$ months.	$\geq 6$ months before first audit			
All farms	6.4.3	a. Maintain daily records (e.g. diary) of monitoring for stress or disease. Records shall identify: <ul style="list-style-type: none"> <li>- date;</li> <li>- presence of behavioural and external signs of abnormalities (i.e. feeding behaviour, swimming behaviour, lesions, spots, large ecto-parasites, fin erosion, etc); and</li> <li>- number of dead fish.</li> </ul> For first audits, records must cover at least 1 full crop per site (see preamble).	1 production cycle per site before first audit			
	6.4.4	<b>Instructions to Clients for Indicator 6.4.4 - Establishing a Threshold for the Reporting of Mortality Events</b> Indicator 6.4.4 requires that farms report all significant mortality events to the aquatic animal health specialist. The ASC Pangasius Standard does not prescribe a specific threshold value for all farms to apply across all circumstances. Instead, the Pangasius Standard requires farms to confer with their aquatic animal health specialist to develop a threshold for reporting mortality events that is appropriate for identifying significant or "above average" mortality events based on farm data. In establishing a threshold, the farm must consider the following: <ul style="list-style-type: none"> <li>- thresholds must be generated using farm data for mortality and this shall include farm information from at least 1 randomly selected pond;</li> <li>- thresholds must be stage-specific to account for differing mortality rates during the 1st week, the 1st month, and any month after that;</li> <li>- the farm's aquatic health specialist must set and approve the threshold value, not the farmer; and</li> <li>- the farm must describe how the threshold was established in the farm's Pangasius Health Plan.</li> </ul>				
		a. Maintain a daily record of monitoring farm enclosures for mortality (see 6.4.3). For first audits, records must cover at least 1 full crop per site (see preamble).	1 production cycle per site before first audit			
		b. Have the farm's aquatic animal health specialist review the farm's daily records for mortality. Ask the AAH Specialist to specify a threshold for the reporting of mortality events based on review of farm mortality rates (see instructions above).	N/A			
		c. Describe how the threshold was established in the farm's Pangasius Health Plan (see 6.3.1).	N/A			
d. Maintain records to show that the farm reports all mortality events exceeding threshold to the AAH Specialist. For first audits, farm records must cover $\geq 6$ months.	$\geq 6$ months before first audit					

Applicability	Reference in AM	Description	Timeframe	Check	Remarks
All farms	6.5.1	<p><b>Instructions to Clients for Indicator 6.5.1 - Calculating Average Growth Rate</b></p> <p>Annex D of the ASC Pangasius Standard provides formulas for calculating yield and average growth rate (AGR). Farms must perform these calculations using harvest and stocking data from individual ponds (i.e. it is calculated on a crop-by-crop basis). It should be done as follows:</p> <p>Yield (from Pond1) = total weight of fish harvested (from Pond1) - total weight of fish stocked (Pond1)</p> <p>AGRP1 = YieldP1 / duration of production cycle (Pond1)</p> <p>Where weights are given in grams (g), duration is given in number of days (d), AGR is computed in units of grams per day (g/d), and enclosures are identified by subscripts P1, P2, P3 etc.</p> <p>Repeat the AGR calculations for the second pond, third pond... etc. until an AGR has been determined for each pond that was harvested. For first audits, records must cover at least 1 full crop per site (see preamble). Next calculate the farm-wide weighted average AGR using the following formula:</p> <p>Weighted Average AGR = [ (AGRP1 x YieldP1) + (AGRP2 x YieldP2) ... + (AGRPn x YieldPn) ] / (YieldP1 + YieldP2 ... + YieldPn)</p> <p><b>Clarification note:</b> Indicator 6.5.1 was developed under the assumption that: - fish are stocked at 80 grams, - harvested at 1,000 grams and - average production cycle is 8 months.</p> <p>Given that specific growth rates of Pangasius are variable with body size (i.e. size and age dependent), formulas will yield a reduced level of absolute growth if fish are harvested at a substantially smaller size than 1 kg. (e.g. farms that harvest fish at 600-700g average body weight).</p> <p>Auditors are instructed as to evaluate Indicator 6.5.1 as follows. Farms must provide auditors with sufficient information to verify average fish weight at stocking, average fish weight at harvest, and average duration of production cycle. Auditors shall review the farm's calculations of observed growth rate and monitor whether the farm is in compliance.</p>			
		a. Maintain records (e.g. receipts from seed suppliers) showing the weight of fish stocked into each enclosure (e.g. see 6.1.1). For first audits, records must cover at least 1 full crop per site (see preamble).	1 production cycle per site before first audit		
		b. Maintain records showing the weight of fish harvested from each enclosure (see 2.4.2b). For first audits, records must cover at least 1 full crop per site (see preamble).	1 production cycle per site before first audit		
		c. Calculate the average growth rate of fish in each enclosure as described above (see instructions above).	N/A		
		d. Using results of 6.5.1c, calculate the farm-wide weighted average AGR.	N/A		
Ponds and Pens	6.5.2	a. Provide a plan of the farm showing surface area (m <sup>2</sup> ) of each enclosure.	N/A		
		b. Maintain records of the total weight (kg) of fish harvested from each pond and/or pen (see 2.4.2b). For first audits, records must cover at least 1 full crop per site (see preamble).	1 production cycle per site before first audit		
		c. For each enclosure, divide the weight of fish harvested (result from 6.5.2b) by the surface area of the enclosure (results from 6.5.2a) to calculate fish density (kg/m <sup>2</sup> ). For first audits, records must cover at least 1 full crop per site (see preamble).	1 production cycle per site before first audit		
		d. Record monthly estimates of fish density for each enclosure using estimated biomass (e.g. from farm diaries) and surface area (see 6.5.2a), in addition to calculating fish density at harvest (6.5.2.c). For first audits, farm records must cover ≥ 6 months.	≥ 6 months before first audit		



Applicability	Reference in AM	Description	Timeframe	Check	Remarks
Cages	6.5.3	a. Provide a description of the system specifying the total number of cages and volume (m <sup>3</sup> ) of each cage.	N/A		
		b. Maintain records of the total weight (kg) of fish harvested from each cage. For first audits, records must cover at least 1 full crop per site (see preamble).	1 production cycle per site before first audit		
		c. Calculate fish density (kg/m <sup>3</sup> ) for each cage, by dividing the weight of fish harvested (result from 6.5.3b) by the volume of the cage (results from 6.5.3a). For first audits, records must cover at least 1 full crop per site (see preamble).	1 production cycle per site before first audit		
		d. Record monthly estimates of fish density for each cage using estimated biomass (e.g. from farm diaries) and cage volume (see 6.5.3a), in addition to calculating fish density at harvest (6.5.3.c). For first audits, farm records must cover ≥ 6 months.	≥ 6 months before first audit		
All farms	6.6.1	a. Provide a list of all predator control devices and their locations.	N/A		
	6.6.2	<b>Instruction to Clients for Indicator 6.6.2 - Presence of IUCN Red Listed Species</b> Determine whether IUCN red list species are present in the region as follows: - go to <a href="http://www.iucnredlist.org/">http://www.iucnredlist.org/</a> - follow to "other search options" - select "Taxonomy" - select "Animalia" - indicate appropriate "Location", "Systems", "Habitat", - click on "run search" and record animal species listed and whether they are threatened by the farming activity. Note: The IUCN Red List uses nine categories for ranking species according to threat, and search results may include species that are not currently threatened. For the purposes of determining whether a farm complies with indicator 6.6.2, species in the following IUCN categories may be excluded from further analyses: "Not evaluated", "Data Deficient", and "Least Concern".			
		a. Perform analysis. Record all IUCN red listed species occurring in the area of the farm.	N/A		
		b. Provide a procedure which describes how the farm will avoid causing mortality, if any IUCN red listed species are identified in the area of the farm (including receiving and source waters).	N/A		
All farms	7.1.1	a. Obtain all national and local labor regulations applicable to the farm. Regulations should cover at least the following issues: labor contracts, child labor, working time, working/living conditions, minimum wage and benefits/allowance, health and safety, presence of on-farm regulation.	N/A		
All farms	7.2.1	a. Maintain a list of all employees employed in the farm indicating date of birth.	N/A		
		b. Maintain copies of the official ID of all the employees listed showing date of birth.	N/A		
		d. Provide a declaration stating that the farm is against child labor and will not employ anybody younger than 15 years old.	N/A		
Farms with employees younger than 18 years old	7.2.2	a. Ensure that the contracts for workers below 18 years old state the rights of young workers (as indicated in this Requirement) and job descriptions are detailed enough to allow auditors to assess that, for such workers, work is restricted to light work and is not hazardous.	N/A		
		b. Maintain records of schooling commitments of each employee younger than 18 years old.	N/A		
		c. Maintain daily records of working hours for all workers younger than 18 years old. For first audits, farm records must cover ≥ 6 months.	≥ 6 months before first audit		
All farms	7.4.1	a. Maintain a list of all the health and safety hazards in the working and living environment of employees.	N/A		
		b. Provide Standard Operating Procedures (SOP) or Safe Practice guidelines (SOP) for all health and safety hazards listed.	N/A		
	7.4.3	a. Maintain records of all accidents and corrective actions taken. For first audits, farm records must cover ≥ 6 months.	≥ 6 months before first audit		
	7.4.4	a. Maintain a list of all permanent workers.	N/A		
		b. Provide evidence showing health insurance coverage for all permanent workers.	N/A		

Applicability	Reference in AM	Description	Timeframe	Check	Remarks
All farms	7.5.1	a. Maintain copies of employees' contracts and ensure that contracts explicitly state the right of freedom of association.	N/A		
		b. Ensure that workers have the freedom to form and join any trade union, are free of any form of interference from employers or competing organizations set up or backed by the employer. ILO specifically prohibits "acts which are designated to promote the establishment of worker organizations or to support worker organizations under the control or employers or employers' organizations.	N/A		
		e. Provide a declaration explicitly stating the employer's commitment to freedom of association and collective bargaining rights of all.	N/A		
All farms	7.6.1	a. Provide and ensure the implementation of an anti-discrimination policy, stating that the company does not engage/support discrimination in hiring, remuneration, access to training, promotion, termination or retirement based on race, caste, national origin, religion, disability, gender, sexual orientation, union membership, political affiliation, age or any other condition that may give rise to discrimination.	N/A		
		b. Maintain records of employees' salary changes, promotions and training opportunities. For first audits, farm records must cover ≥ 6 months.	≥ 6 months before first audit		
		c. Provide and ensure the implementation of a policy protecting pregnant and lactating mothers.	N/A		
All farms	7.8.1	a. Maintain timesheets for all employees. For first audits, farm records must cover ≥ 6 months.	≥ 6 months before first audit		
All farms	7.8.2	b. Maintain copies of employees contract and ensure that labor contracts clearly state workers' right to leave.	N/A		
	7.8.3	c. Maintain timesheets for all employees (as in 7.8.1a). For first audits, farm records must cover ≥ 6 months.	≥ 6 months before first audit		
All farms	7.8.4	b. Maintain timesheets for all employees (as in 7.8.1a). For first audits, farm records must cover ≥ 6 months.	≥ 6 months before first audit		
		c. Maintain copies of employees' contracts and ensure that employees' contracts state the overtime conditions and associated rights.	N/A		
		d. Maintain records of payments for overtime hours.	N/A		
All farms	7.9.1	a. Obtain legal documents showing minimum wages for the location where the farm operates.	N/A		
		b. Calculate basic needs wages, in consultation with workers and their representative organizations, and cost of living assessments from credible sources, if minimum wage has not been established by law. Document the process and ensure that all workers have access to it at reasonable times.	N/A		
		c. Maintain copies of employees' contract and ensure that at least minimum wages are paid to employees.	N/A		
		d. Maintain receipts of salary payments. For first audit, receipts must cover ≥ 6 months.	≥ 6 months before first audit		
All farms	7.9.2	a. Provide a declaration stating the mechanism used for setting wages.	N/A		
	7.9.3	a. Maintain records of the preferred method of payment for each employee.	N/A		
		b. Maintain records of payments indicating the method of payment.	N/A		
All farms	7.10.2	a. Maintain copies of contracts of employees (other than farm managers and workers with a university degree) and ensure that the probation time is clearly stated and does not exceed 1 month.	N/A		
	7.10.3	a. Maintain copies of contracts of farm managers and workers with a university degree) and ensure that the probation time is clearly stated and does not exceed 2 months.	N/A		
All farms	7.11.1	a. Maintain complaint boxes for employees throughout the farm.	N/A		
	7.11.2	a. Maintain a register recording issues raised by workers (including complaint forms), date and response taken. For first audit, register must contain all records of the previous ≥ 6 months.	≥ 6 months before first audit		
	7.11.3	a. Maintain evidence of issues raised by workers and being resolved. Evidence may include letters signed by employees or their representatives.	N/A		
		b. Record the issues being resolved in the register as for 7.11.2a.	N/A		
		c. Maintain monthly summaries and calculations of the percentage of issues resolved within 1 month.	N/A		

Applicability	Reference in AM	Description	Timeframe	Check	Remarks
All farms	7.11.4	a. Maintain a register recording issues raised by workers (as for 7.11.2a) and including the plan for addressing yet to be resolved conflicts.	N/A		
	7.11.5	a. Provide a declaration of commitment to contract only suppliers and service providers that ensure suitable health and safety condition within 1 year, for the first audit.	1 production cycle per site before first audit		
All farms	7.12.1	a. Maintain timesheets for all employees. For first audits, farm records must cover $\geq 6$ months.	$\geq 6$ months before first audit		
		b. Maintain a list of all employees employed in the farm.	N/A		
All farms	7.13.1	a. Provide a p-SIA inclusive of all items reported in Annex F in the Pangasius Standard. For large scale farms (e.g. vertically integrated operations) the p-SIA must be commissioned to professional experts. A new p-SIA should be conducted at least every 3-years.	N/A		
		b. Provide evidence of the experience of the professional experts commissioned, for large scale farms. Evidence must indicate a track record of at least 3 years conducting participatory consultations with rural communities.	N/A		
All farms	7.13.2	a. Maintain records of all the people having received copy of the p-SIA.	N/A		
		b. Obtain signatures from at least 50% of the people having received the p-SIA. The people signing must include at least: a representative of the local community (if such a representant can be identified by the majority of the community), a representative of the local government and one civil society organization (if available).	N/A		
All farms	7.14.1	a. Provide the application of a conflict resolution policy for local communities.	N/A		
		b. Maintain records of all the people having received copy of the policy.	N/A		
		c. Obtain signatures from at least 50% of the people having received copies of the policy. The people signing must include at least: a representative of the local community (if such a representant can be identified by the majority of the community), a representative of the local government and one civil society organization (if available).	N/A		
		d. Maintain records of meetings (at least twice per year) held with local communities to identify and resolve conflicts. Records must include list of participants, agendas and agreed action plan and summaries. For first audits records must cover at least one meeting (this could be part of the p-SIA process if the p-SIA was conducted less than 6 months before the audit).	one meeting $\geq 6$ months before first audit		
	7.14.2	a. Maintain complaint boxes in public locations reachable by the local community.	N/A		
		b. Retain complaint forms submitted by local communities. For first audits, records must include at least previous $\geq 6$ months.	$\geq 6$ months before first audit		
		c. Provide evidence that complaints have been acknowledged to the local community (e.g. through a statement from the local community stating having received acknowledgement or acknowledgement receipts).	N/A		
		d. Maintain a register of the complaints received. Register should include date, complaint and action taken. For first audits, register must contain records from at least previous $\geq 6$ months.	$\geq 6$ months before first audit		
	7.14.3	a. Maintain a register of complaints as per 7.14.2d, clearly identifying what complaints have been resolved and the resolution date.	N/A		
		b. Maintain minutes of community meetings as per 7.14.1d showing issues discussed and issues resolved.	N/A		
All farms	7.15.1	a. Maintain a list of all employees employed in the farm indicating also place of origin.	N/A		
		b. Provide copies of the dated advertisements posted around the farm to advertise, for farms where employees are coming from a location other than the location of the farm (based on 7.15.1a). For first audit copies must cover more than previous $\geq 6$ months.	$\geq 6$ months before first audit		
	c. Provide a list containing the name, address and contact number of all the people consulted to advertise the position in the local community, for farms where employees are coming from a location other than the location of the farm (based on 7.15.1a). For first audit records must cover more than previous $\geq 6$ months.	$\geq 6$ months before first audit			
	7.15.2	a. Maintain a list of all employees employed in the farm indicating also place of origin as in 7.15.1a.	N/A		
b. Provide a written explanation for employing workers outside the local community, for farms where employees are coming from a location other than the location of the farm (based on 7.15.1a).		N/A			