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DEVELOPING AGRICULTURAL PRODUCTION ASSOCIATED WITH ENVIRONMENTAL PROTECTION IN THE TREND OF SUSTAINABLE ECONOMIC DEVELOPMENT

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Abstract

The article focuses on analyzing the current status of waste treatment from farming and agricultural production in the context of sustainable economic development, pointing out unreasonable points in the law in waste management. in agriculture leads to difficulties in implementing measures to minimize environmental pollution during agricultural production.

Key Words: *agricultural production, sustainable development, livestock waste, pesticides, aquaculture*

1. QUESTION

According to 2021 statistics from the Ministry of Natural Resources and Environment, the total amount of solid waste generated in farming activities in our country is approximately 661.5 thousand tons, including 550 thousand tons of nylon waste; 77.49 thousand tons of packaging and fertilizer waste and 33.98 thousand tons of pesticide waste ¹. In addition, the issue of strengthening the management, reuse, recycling, treatment and

minimization of plastic waste is mentioned by the Prime Minister in Directive No. 33/CT-TTg, specifically: for waste plastic in agriculture The Prime Minister requested the Ministry of Agriculture and Rural Development to develop and implement a plan to reduce, collect and recycle plastic waste in the crop, livestock and fisheries sectors; recall packaging of pesticides and fertilizers; Prepare raw materials for products to replace non-biodegradable plastic bags and disposable plastic items from agricultural products. Thereby, it is seen that environmental issues from production activities in the agricultural sector have a close relationship with the environment, the development of agricultural production must always go hand in hand with environmental

¹Khanh Huy-People's Newspaper, Reducing environmental pollution in agricultural production, <https://nhandan.vn/giam-o-nhiem-moi-truong-trong-san-xuat-nong-nghiep-post782168.html>, [Accessed on November 24, 2023]

protection plans. Currently, the collection and treatment of livestock waste is adjusted in Circular No. 12/2021/TT-BNNPTNT, but there is still a lack of specific plans and measures in application to treat waste. waste in livestock and aquaculture activities effectively. For packaging and bottles of plant protection drugs, the collection and treatment plan is mentioned in Joint Circular 05/2016/TTLT-BNNPTNT-BTNMT. Accordingly, the document has set out infrastructure standards such as standards for tanks and places to store pesticide packaging, but has not yet proposed gathering plans and responsible entities. In the management of collection, waste includes packaging, bottles, and chemical fertilizers, making the problem of handling these wastes still very inadequate in practice. In addition, current aquaculture activities still have many legal issues that have not been mentioned or have specific regulations but the enforcement efficiency is not high, and the abuse situation has not been completely resolved. environment during these activities.

2. STATUS OF ENVIRONMENTAL PROTECTION IN AGRICULTURAL PRODUCTION FOLLOWING THE TREND OF SUSTAINABLE ECONOMIC DEVELOPMENT

2.1. Environmental pollution due to direct discharge of solid waste from agricultural production into the environment

2.1.1. Plans and procedures for treating waste in livestock production

According to the Department of Livestock, livestock waste is one of the largest sources of pollution in agricultural production. Each cow can excrete 10-15kg of feces/day, 1 pig can excrete 2.5-3.5kg of feces/day; Each poultry produces 90g of feces/day, accordingly, the total volume of livestock waste is about 73 million tons/year². Pursuant to the provisions of Point b, Clause 1, Article 5 of Circular No. 12/2021/TT-BNNPTNT regulating the treatment of livestock waste: "Solid waste of organic origin in farm livestock has been treated to meet Meets national technical regulations to be used for crops or as food for aquatic animals. While there are no national technical regulations, the treatment of solid waste of organic origin is carried out according to the instructions of specialized management agencies. Accordingly, the law stops at being instructions for using products after the waste has gone through the treatment process without setting out specific plans and measures to apply immediately in practice to solve the problem. local environmental pollution problem and this problem is also repeated similarly to the issue of livestock wastewater at Point b, Clause 2, Article 5 of Circular No. 12/2021/TT-BNNPTNT. Therefore, self-organization and implementation of livestock waste treatment measures at households is difficult to organize consistently and does not have high enforcement value. On the other hand, Circular No. 12/2021/TT-BNNPTNT stipulates "Encourage the use of biological products, application of

²Environmental Protection Department - Department of Natural Resources and Environment of Ha Nam province, Guidance on environmental protection in livestock farming, <https://sotnmt.hatinh.gov.vn/sotnmt/portal/read/moi-truong/news/huon-dan-bao-ve-moi-truong-trong-chan-nuoi.html>, [Accessed on 23rd /November 2023]

technological advances and new techniques in the process of treating livestock waste"³. However, in reality, there is no document stipulating the responsibilities of the authorities in implementing plans to apply technical and technological measures in specific stages, and there is a lack of revenue policies. Attract investment in plans to support the development and application of technological advances in livestock waste treatment, so the use of biological products, application of technological advances and new techniques in the waste treatment process. Livestock waste in reality is still not very useful in localities.

Faced with that situation, the author believes that adding specific regulations on livestock waste treatment plans and processes is extremely urgent, an important foundation for selecting and implementing solutions. Effective treatment of livestock waste suitable for each locality. In addition, it is necessary to specifically stipulate specialized or part-time organizations depending on the economic conditions of each region responsible for organizing the uniform collection and treatment of livestock waste in each locality to avoid extrusion. promote responsibility, promptly implement legal regulations and policies on livestock waste management into daily life and propose solutions to overcome problems that arise during the operation of treatment models. local waste. On the other hand, it is necessary to strengthen regulations and strengthen inspection and supervision to apply sanctions to households and individuals who commit environmental discharge instead of relying solely on self-awareness and policies. Support and encourage the implementation of treatment measures to protect the environment.

2.1.2. Centralized management and waste treatment in livestock farming

The current situation of solid waste generation from livestock activities is one of the factors that directly impacts the natural environment of the ecosystem and especially affects the residential community.

Pet	Average CTR (Kg/day/bird)	Amount of solid waste (million tons/year)		
		2015	2017	June 2018
Cow	10.00	19.59	20.64	55.88
Buffalo	15.00	13.82	13.64	37.2
Pig	2.00	25.32	25.01	52.84
Poultry	0.02	2.50	2.81	7.56
Goat, sheep	1.50	1.03	1.49	-
Horse	4.00	0.09	0.13	-
Deer	2.50	0.06	0.06	-
total		62.41	63.78	153.4

Source: Tin Hong Nguyen (2017), Overview of agricultural pollution in Vietnam: Livestock industry 2017. Regional agricultural pollution research report, coordinated between the

³ Clause 3 Article 5 Circular No. 12/2021/TT-BNNPTNT guiding the collection and treatment of livestock waste and agricultural by-products for reuse for other purposes

Solid waste generated from pig farming: 30.3%; Poultry: 27.4%; Cow: 23.7%; Buffalo: 17.1%. Of which, 36% of animal feces is discharged directly into the environment. 16% of waste is discharged from centralized facilities, 40% of waste is scattered at livestock farms. From the above data, it can be seen that the energy burden from the amount of livestock waste periodically discharged into the environment is very large, and its scattered and unfocused distribution is the main cause of difficulty in applying measures. Accordingly, setting up measures to concentrate livestock waste in a certain location is an effective plan and an important first step in treating livestock waste scientifically, avoiding causing harm. environmental consequences such as groundwater pollution, soil degradation, etc., destroying the regional ecosystem .

Pursuant to the provisions of Point c, Clause 1, Article 4 of the Law on Environmental Protection 2020, it is stipulated: *"The location of gathering solid waste within the premises of a farm livestock facility for treatment must be far from the livestock area and far from the water supply place."* , animal feed storage area" . Thus, for farm models, the law stipulates that the location of solid waste must be located on the premises, far from barns and feed storage areas, but does not mention the exact size of the distance. between the location of solid waste concentration and the livestock barn, food warehouse, etc., so in reality, the location of solid waste concentration mainly depends on the livestock conditions and farm area of each individual. basis. On the other hand, the problem of solid waste concentration is to avoid causing local pollution, affecting the general life of neighboring households. However, there are currently no regulations on the minimum distance required between solid waste collection locations and neighboring households and other structures. Therefore, the responsibility of livestock households in protecting the regional ecosystem in waste treatment has not been strictly managed.

In addition, the current situation seems to be non-specialized, small distribution, mainly serving the individual needs of each household. For example, in Phu Tho province, according to recent survey data, households raising pigs and chickens according to the farm and business model only account for nearly 1%, so up to 99% of chickens, buffaloes and cows are still concentrated. raised in small-scale households ⁴. From that situation, the issue of centralized garbage collection and treatment ensures minimizing pollution from solid waste in livestock farming to the living environment and the application of technical measures in some areas is almost impossible. It is not feasible and the actual application performance is low.

From the above analysis, the author believes that lawmakers need to have specific regulations in the construction of solid waste collection locations in terms of scale and distance from the special

⁴Quoc Vuong - Hung Cuong-Phu Tho Newspaper, Livestock facing the need for sustainable development, https://baophutho.vn/lanh-te/chan-nuoi-truoc-yeu-cau-phat-trien-ben-vung/43128.htm?gidzl=EjG63hbldmS_pG40ld6P1pR90WMf8vi7_APe30A4lpW1qnra1zd-JL72L3rtvAfK9Avu2NJYnZAYmkMcV3m , [Accessed November 24, 2023]

location where solid waste is discharged to the construction sites. neighboring programs, enhancing the responsibility of livestock households in waste discharge issues. In addition, it is necessary to consider building centralized areas and waste treatment in the direction of inter-self-management groups, laying the foundation for centralized management of waste in livestock production and implementing solutions to thoroughly solve the problem. to and sustainably in the regions . On the other hand, the law also needs to clarify the responsibilities of relevant entities such as state agencies, livestock households, and investors providing waste treatment services in environmental protection of regional ecosystems. in waste treatment

Regarding the current situation of small-scale livestock farming, the author believes that it is necessary to consider the solution of cooperation in building biogas tanks focused on using for common purposes of households according to the implementation plan of the authorities. For excess bioenergy from biogas tanks that have not been used in households, authorities and grassroots forces coordinate to mobilize households to use it for public purposes such as lighting systems. Roadside lights or used by households instead of disposing into the natural environment. In addition, for households with suitable farming models, it is necessary to mobilize and deploy cooperation to build closed models of gardens, ponds, and barns, in order to take advantage of waste from the farming process to continue serving. for agricultural benefits following the trend of cooperation and development among households.

2.2. Environmental pollution due to abuse of pesticides

Pesticides are substances or mixtures of substances or microbial preparations that have the effect of preventing, stopping, repelling, attracting, destroying or controlling organisms harmful to plants; plant or insect growth regulation; plant preservation; Increases safety and effectiveness when using drugs ⁵. Thus, pesticides are an indispensable part of agricultural production to ensure crop productivity and minimize damage to agriculture, but at the same time they also cause a huge impact on the degradation of the ecosystem. to human health. In the context of climate change, the cultivation of both annual and perennial crops is becoming increasingly harsh and always facing different types of diseases. Therefore, with the quick effects of chemical fertilizers, households tend to use them uncontrolled and unplanned, resulting in a large amount of chemical fertilizers and toxic pesticides remaining. back to the environment.

According to the General Association of Agriculture and Rural Development (Agriculture and Rural Development): Vietnam is one of the countries that uses a lot of pesticides and is difficult to control. Preliminary statistics show that, on average, in the past 5 years, each year Vietnam has spent 500-700 million USD to import plant protection chemicals. Of these, 48% are herbicides, equivalent to 19 thousand tons, the remaining are pesticides and fungicides, about over 16 thousand tons. According to the Business Association produces and trades pesticides in Vietnam. Currently, pesticides in Vietnam are imported from more than 40 countries, but most from China. Previously, imports from China accounted for over 80% of the total output of pesticides imported into

⁵Clause 16, Article 3 , Law on Plant Protection and Quarantine 2013

Vietnam. At this time, although output has decreased, it still accounts for about 60-70% ⁶. The above figures show that our country is a country with a large consumption of pesticides, which means that the amount of dangerous waste generated is a big challenge for Vietnam's management of this issue. pesticides. Regulations on plant quarantine; Pesticide management is regulated in the 2013 Law on Plant Protection and Quarantine, environmental protection activities; The rights and obligations of subjects in environmental protection are stipulated in the Law on Environmental Protection 2020, as well as The management of pesticides allowed to be used and banned from use in our country is currently regulated in Circular No. 19/2022/TT-BNNPTNT with thousands of active ingredients and trade names as well as circulars and decrees. another guide.

Pursuant to Clause 1, Article 51 of Decree 38/2015/ND-CP on waste and scrap management stipulates: "*Hazardous waste is packaging containing toxic chemicals or toxic chemical products used in agricultural and forestry production must be collected, stored, transported and treated according to regulations on hazardous waste management* . Accordingly, packaging and products that directly serve the agricultural production process are mostly hazardous waste and must be collected and treated by a specialized process. However, the use of chemicals is for immediate economic benefits and to quickly promote the growth of crop yields and has not properly applied agricultural waste treatment measures such as plastic bottles , medicine, chemical fertilizers is the agent causes soil degradation, water and air pollution. From the above reality, it is necessary to quickly and effectively promote propaganda and education on the use of pesticides in households, specifically: local state agencies in combination with businesses. Production and sales of pesticides must carry out practical sessions, programs and plans to evaluate the effectiveness of pesticides on plants to guide people in using pesticides properly and avoid cases of misuse. too many drugs for one plant disease.

In the current period , the main problem is the proper collection, transportation and treatment of pesticides after use , avoiding negative impacts that change the ecosystem. According to the provisions of Article 3 of Joint Circular 05/2016/TTLT-BNNPTNT-BTNMT on the issue of collecting pesticide packages after use, conditions in tanks and storage areas are regulated. when put into use. However, gathering pesticide containers from households to storage areas is a difficult problem, due to unfocused and small-scale production, awareness of sustainable development issues. , economic benefits always closely linked to environmental protection in the community are still low, so improving self-awareness The issue of centralized collection of pesticide packaging, contributing to environmental protection in the direction of sustainable development, has not yet brought high efficiency in practice .

In addition, Point a, Clause 2, Article 3 of Joint Circular 05/2016/TTLT-BNNPTNT-BTNMT stipulates: "*Place in suitable,*

⁶Phong Nguyen (2020), *Over 100,000 tons of pesticides imported each year: Can the quality be controlled?*. <https://laodong.vn/xahoi/tren-100000-tan-thuoc-bao-ve-thuc-vat-nhap-khau-moi-nam-co-kiem-soat-duoc-chat-luong-852005. ldo>. [Accessed November 23, 2023]

easily recognizable locations along the road, internal field traffic axis, and field edges." big; not flooded, near the drug preparation point before being sprayed to facilitate the collection of pesticide packages after use; does not affect domestic water sources, residential areas, traffic and rural beauty." However , proposing plans to build centralized locations in certain locations does not specifically stipulate specialized agencies to implement models of plant protection waste collection, so the models are In reality, this model has not yet brought widespread implementation value in localities . In addition, the author believes that to ensure investment and implementation of construction of pesticide packaging collection points according to a specific process, it must be specified by support policies of the Government. water in stages .

On the other hand, in most localities, the boundaries between fields are often small in area because the exploitation process of farmers tends to encroach and cut into the boundaries. Therefore, the area for placing pesticide waste collection models in some localities is still difficult due to lack of consensus on construction locations. Faced with that situation, the author believes that it is necessary to have specific projects in mobilizing and investing in building collection models under the agreement and commitment of households in the area to ensure the Operation of the above models is maintained in a sustainable manner. In addition , lawmakers need to specifically stipulate the responsibilities of the authorities on the issue of implementing and building models for collecting pesticide packaging and bottles by developing implementation plans according to Each stage is appropriate to local socio-economic conditions. At the same time, the State needs to develop investment funding support projects for collection models in some areas with particularly difficult economic conditions or encourage investors to invest in supplying waste products. The service of collecting pesticide packaging and bottles aims to bind investors in the supply process to ensure the construction of equipment to serve the collection and treatment of waste.

In addition, Clause 3, Article 4 stipulates: "*Pesticide packaging after use in tanks or storage areas must be transferred to a unit with appropriate functions and capacity for handling according to regulations." on hazardous waste management"*. Accordingly, the law is still lacking regarding vehicles and teams transporting agricultural waste, and there is no specific regulation on the agency responsible for receiving pesticide packages and moving them to the destination. treatment locations, thus causing many difficulties for localities in collecting and processing pesticide packaging. On that basis, the author believes that it is necessary to specifically regulate the support and construction of works to collect and process pesticide bottles and packaging, and promote the establishment of management teams. In charge of technical issues of waste treatment at gathering points and specifying handling measures for violations of waste management from pesticide packaging.

2.3. Environmental pollution in aquaculture activities

In recent years, the fisheries industry has been considered one of the key economic sectors of our country. The growing level of science and technology has led to the introduction of modern technologies to serve the aquaculture sector, thereby improving productivity and reducing catch rates, contributing to the protection of aquatic products. in nature. According to statistics, total seafood production in 2022 will reach 9 million tons, of which aquaculture

accounts for 5.19 million tons ⁷. However, the above development has created a difficult problem in state management of waste in the aquaculture process. Accordingly, aquaculture is the agricultural activity with the highest risk of causing environmental pollution. The main cause is due to aquatic waste combined with decomposed excess food and residues from materials used in farming that settle to the bottom, forming layers of mud and water containing many toxins harmful to aquatic products as well as human health ⁸. Besides, aquaculture wastewater also contains toxic components that can pollute the environment and need to be treated such as high organic substances (BOD5 12 - 35mg/l, COD 20 - 50mg/l), Nutrients (phosphorus, nitrogen), suspended solids (12 - 70mg/l), ammonia (0.5 - 1mg/l), coliforms (2.5,102 -3,104 MNP/100ml)... contain many ingredients Toxic and disease sources need to be thoroughly treated before being discharged into receiving waters ⁹.

2.3.1. Licensed for aquaculture activities

The 2017 Fisheries Law stipulates: *"Aquaculture facilities must meet the following conditions: i) The location of the aquaculture facility must comply with regulations on land use and sea areas for aquaculture. aquaculture according to the provisions of law; ii) Have facilities and technical equipment suitable for the subject and form of farming; iii) Meet the legal regulations on environmental protection, veterinary medicine and labor safety; iv) Meets legal regulations on food safety; v) Must register for cage aquaculture and key aquaculture species.*

Accordingly, only subjects that meet the above conditions are allowed to carry out aquaculture activities, or in other words, this is the obligation of the person carrying out aquaculture activities. Particularly for those raised in cages or raising one or several key aquatic species, they must go through registration procedures at a competent state agency. Article 3 of Decision No. 50/2018/QĐ-TTg lists the main aquaculture species including: *"Black tiger shrimp, whiteleg shrimp and pangasius"*. Thus, only those raising pangasius, white-legged shrimp, black tiger shrimp or raising them in cages can register. This is a commitment to fully comply with the conditions of facilities, equipment, especially the environmental protection requirements of the subjects before conducting aquaculture activities. However, in cases where registration is not required, it is very difficult for the state to control conditions according to regulations on aquaculture such as raising catfish, tilapia, carp, etc. The limitation of cases requiring registration has created conditions for entities outside this scope. Carrying out farming activities arbitrarily, not ensuring the conditions prescribed by law, causing inconsistency in management, especially the environment. From the above analysis, the author believes that lawmakers should expand the subjects that need to register for aquaculture to *"Subjects carrying out aquaculture activities must register with state agencies."* have

⁷ACC Law Firm, " Overview of the latest situation of Vietnam's fisheries industry "

<https://accgroup.vn/thuy-san-viet-nam> [Accessed November 23, 2023]

⁸Ca Mau province electronic information portal, "Environmental protection solutions in aquaculture in the Mekong Delta", <https://camau.gov.vn/wps/portal> , [Accessed on December 24, 2023]

⁹Pham Dinh Con, <https://moitruongdeal.vn/thuc-trang-o-nhiem-moi-truong-do-nuoi-trong-thuy-san-tai-dbscl-news18-117.html>

[Accessed November 23, 2023]

authority". This makes management more convenient for competent authorities. In addition, the license to register aquaculture activities becomes the basis to prove that the aquaculture entity has met the facility and environmental conditions, contributing to improving management efficiency. environment, minimizing water pollution caused by this activity .

Currently, aquaculture registration is under the authority of the provincial-level fisheries state management agency, specifically: *"The provincial-level fisheries state management agency is the agency that receives, appraises and issues Certificate of registration for caged aquaculture, key aquaculture species"* ¹⁰. In the author's opinion, the above regulations are still not appropriate, because the amount of registration applications received across the entire provincial administrative unit is very large, so the appraisal of registration dossiers faces many difficulties. difficult, lacking accuracy about natural conditions and specific situations in each area. For example, the situation of Phu Yen province, Ms. Le Thi Hang Nga, Deputy Director of Phu Yen Fisheries Department, said that the whole province has about 2,000 hectares of ponds for raising shrimp, brackish and salt water fish and about 100,000 cages/rafts. lobster and sea fish farming. However, up to now, the whole province has only issued 1 certificate of registration for cage aquaculture and 133 certificates of key aquaculture species ¹¹.

In addition, it is necessary to specifically stipulate the authority to issue licenses and the responsibility to supervise and inspect compliance with the law during the farming process for local state management agencies such as *"(i) State management of fisheries at the district level considers issuing licenses to individuals and households engaged in aquaculture within the district; (ii) Provincial fisheries state management agencies consider granting licenses to organizations within the province;... which ensures coordination and advice from local authorities where aquaculture locations are located. products need to be registered . This helps shorten the time to process registration requests as well as increase the accuracy of dossier appraisal. At the same time , simplify the inspection of land conditions in cases of land allocation or land lease for aquaculture because the majority of cases fall under the jurisdiction of the People's Committee and the People's Committee. level with specialized agencies.*

2.3.2. Waste treatment in aquaculture activities

waste from aquaculture activities is not treated properly, it can cause serious harm to the soil and water environment in the pond area, with many potential risks of spreading dangerous pathogens to aquatic animals. other aquatic species, affecting neighboring farming areas. Worth mentioning, most small and medium-scale aquaculture households today are not strictly controlled, do not arrange a waste control system as well as treat waste before discharging it outside, so the discharge is often done arbitrarily and without control. The Law on Environmental Protection strictly prohibits the act of *"Discharging wastewater and exhaust gases that have not been treated to meet environmental technical standards into the environment"* ¹². However, in the field of

¹⁰Clause 1, Article 36 of the Fisheries Law 2017

¹¹Kim So, "Difficulties in issuing certificate of registration for cage aquaculture", <https://nongnghiep.vn/kho-khan-cap-giay-xac-nhan-dang-ky-nuoi-trong-thuy-san-long-be-d368306.html> [Accessed November 23, 2023]

¹²Article 6 of the Law on Environmental Protection 2020

aquaculture, there are no specific regulations addressing penalties for entities that discharge waste into the environment. Clause 7, Article 61 of the Law on Environmental Protection mentions: *"The Ministry of Agriculture and Rural Development is responsible for directing and organizing the management of dredged sludge from canals, ditches and irrigation works to meet protection requirements. environment"*, accordingly, the Ministry of Natural Resources and Environment issued Circular 02/2022/TT-BTNMT together with National Technical Regulation QCVN 50:2013/BTNMT applicable to all organizations and individuals with related activities. related to sludge from water treatment. However, the circular and regulations do not mention the issue of wastewater sludge treatment in aquaculture and hazardous substances contained in wastewater sludge. It can be said that this is an omission that causes difficulties in detecting, inspecting and handling violations in aquaculture waste discharge because there is no basis for comparison to determine violations.

From the above analysis, the author believes that it is necessary to supplement regulations Responsibilities of entities carrying out aquaculture activities when violating regulations on environmental protection as well as conditions on waste treatment processes in the direction of promulgating a document specifically regulating *"sanctions for administrative violations in aquaculture activities"*, which predicts possible violations and corresponding fines. In addition, issue specific regulations on standards of waste treatment processes and systems, and set certain criteria as a basis for assessing the appropriateness of waste management measures of farmers. .

On the other hand, it is necessary to promote inspection and supervision of law enforcement by aquaculture facilities to promptly detect and strictly handle any violations. It can be said that this is a key factor that determines the effectiveness of applying the law in practice, because only strict control and regular inspection can minimize violations, contributing to reducing the number of violations. Reduce pollution and improve the environment. In addition to sanctions, there also needs to be a system of commendation and reward for individuals, competent agencies or aquaculture entities that perform their work well and actively contribute to conservation. Environmental protection in the field of aquaculture according to the provisions of the Law on Environmental Protection: *"Honor and reward agencies, organizations, communities, households and individuals that make positive contributions to activities." protect the environment according to the provisions of law"*¹³. This contributes to creating positive motivation for subjects to proactively fulfill their obligations in the aquaculture process, thereby positively impacting the overall sustainable development of the agricultural industry.

3. CONCLUDE

In summary, for sustainable economic development, environmental protection needs to be focused and measures to treat waste from economic activities before being discharged into the environment must be applied. According to Conclusion No. 54-KL/TW of the Politburo, defining goals in developing infrastructure in the agricultural sector must always focus on ecological balance, ensuring sustainable economic development. solid. From the above analysis, it can be seen that difficulties in implementing regulations and policies on environmental protection in agricultural production

activities arise from causes such as technical models and treatment technologies. Waste management does not meet practical requirements because most people produce on a small and medium scale, which does not bring economic efficiency when investing in the system. In addition, people's awareness of the environment when developing agricultural production is still weak, there is a lack of self-awareness, the State's support policies are not complete and synchronous, so implementation leads to delays. lags behind the current state of environmental pollution in each locality. On that basis, lawmakers need to promote improvement in regulating specific options for waste collection and treatment in each field. Strengthen inspection, supervision and handling of violations on waste management issues in livestock, farming and aquaculture. At the same time, clarify the responsibilities of state agencies in monitoring waste collection, transportation and treatment processes. In addition, it is necessary to consider the issue of socialization in the collection and treatment of waste in agriculture to reduce the burden on the State, as well as speed up work to reduce environmental pollution. From there, a solid legal corridor for sustainable development in the agricultural production process can be completed.

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