Development Of An Export Certification System At The Agricultural Quarantine Center With The Waterfall Method

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Keywords:	Abstract: In the process of checking export
Export Certification, Agricultural Quarantine	certification at the Class II Agricultural
Center, Website.	Quarantine Center in Medan Kualanamu, it still uses a manual system with large
*Correspondence Address:	bookkeeping so that it takes up space in
Email: zulfahmi@dosen.pancabudi.ac.id	manual data storage. The result of the research is the availability of an export certification system at the Medan Kualanamu Class II Agricultural Quarantine Center Based on the Website, so that the report on the application for export certification at the Medan Kualanamu Class II Agricultural Quarantine Center. the export certification system at the Medan Kualanamu Class II Agricultural Quarantine Center which was built has met the functional requirements. However, in the process it is still possible to make mistakes. Functionally, the system that has been built can produce the expected output.

INTRODUCTION

Every country including Indonesia, if it wants to trade, especially agricultural commodities, must be able to meet the phytosanitary provisions of the destination country for export. So far, in the trade of Indonesian export commodities, there are still obstacles in the plant health certification process. The emergence of these obstacles is more due to the fact that most of the requests from service users are made too close to the departure schedule, while for certain commodities it takes time for plant health certification to comply with the phytosanitary requirements of the destination country for export[1].

As a result, the competitiveness of Indonesian export production abroad is less competitive. In an effort to support the competitiveness of export commodities in the international market, the Agricultural Quarantine Agency through the Plant Quarantine Center directs that the certification process for export commodities be carried out outside the place of export. Plant quarantine measures for export commodities outside the place of export can be In-line Inspection Guidelines 2 carried out during the production process or part of the production process[2].

Export Certification is an export certificate issued by the Head of the local Provincial Service based on SPEM for the needs of buyers in accordance with the provisions for importing manioc. The purpose of export certification is to serve as a reference for Plant Quarantine Officers in carrying out inspection actions and other quarantine actions required as part of the plant health certification process (phytosanitary certification) for plants, plant parts, and other commodities other than plants or plant products that will be sent to the destination country for export. In addition, it can also be used by other parties interested in the certification process. In addition, it also aims to ensure that the inspection process and other quarantine actions required for commodities to be exported from the production site to the point of release can be carried out in accordance with the provisions of laws and regulations. The Class II Medan Kualanamu Agricultural Quarantine Center is a merger of two Technical Implementation Units (UPT) within the Agricultural Quarantine Agency, namely the Class II Medan Kualanamu Animal Quarantine Station and the Class II Medan Kualanamu Plant Quarantine Station. Since April 3, 2008, the two UPTs have merged under the name of the Class II Medan Kualanamu Agricultural Quarantine Center based on the Regulation of the Minister of Agriculture Number 22/Permentan/OT.140/4/2008 concerning the Organization and Work Procedures of the Agricultural Quarantine Technical Implementation Unit, then replaced by the latest Ministerial Regulation, namely the Ministerial Regulation Number: 47/Permentan/OT.140/4/2020 dated December 23, 2020 concerning the Organization and Work Procedures of the Agricultural Quarantine Agency Technical Implementation Unit.

RESEARCH METHODS

To assist in the preparation, it is necessary to have a clear framework of stages. This framework is the steps that will be taken in solving the problems to be discussed. The research framework used is as shown in Figure 1[3]:

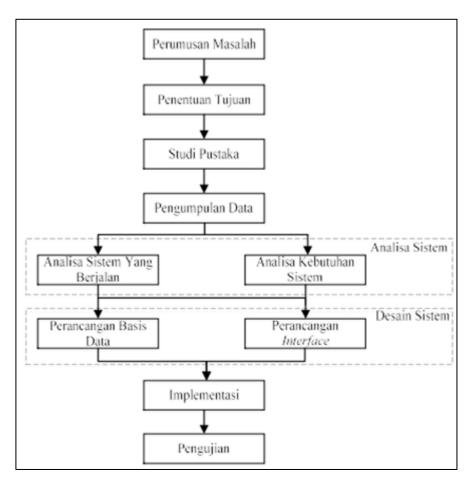


Figure1 Research Framework

1. Problem Formulation

Problem formulation is carried out in finding problems in the export certification system process at the Class II Medan Kualanamu Agricultural Quarantine Center Based on the Website, which is one of the agricultural centers that determines whether plants are suitable for export or not, in addition, in the plant export process there must be a certificate issued and recognized by the quarantine center[4].

2. Determination of Objectives

Determination of objectives is obtained after completing the problem formulation stage, where the results of the problem formulation become a reference for determining objectives, so that the problems at the Class II Medan Kualanamu Agricultural Quarantine Center in issuing certificates are increased significantly[5].

3. Literature Study

Data collection by using or collecting written sources, by reading, studying and noting important things related to the problem being discussed in order to obtain a

theoretical picture.

4. Data Collection

The data collection stage is carried out in order to obtain accurate data before carrying out the next stage, data collection is carried out in two stages, namely analysis of the running system and analysis of system needs in solving problems on the feasibility of plant exports at the Class II Medan Kualanamu Agricultural Quarantine Center[6].

5. System Implementation

The implementation stage is the application of the design and draft stages in building the system.

6. System Testing

The system built in the implementation stage will be tested at this stage, in order to answer the problems and produce solutions for this research.

RESULTS AND DISCUSSION

The display of the export certification system at the Class II Medan Kualanamu Agricultural Quarantine Center Based on the Website is divided into two parts, namely the user section consisting of the home display, information display, submission data display, history data display, profile data display and logout display. The second part is the admin section consisting of information display, history data display, user data display and logout display. The display of the export certification system menus at the Class II Medan Kualanamu Agricultural Quarantine Center Based on the Website is as follows.

1. The Login View

The login view is the initial display when the system starts running, which contains the logo of the agricultural quarantine agency, application title, username form, password form, registration button and login button.



Figure 1 Login view

2. Submission Data Display

The login display is the initial display when the system starts running, which contains the logo of the karanti agency The submission data display is a display that is in the user account and functions as filling in the export certificate submission data. Which consists of company / agency profile data that wants to submit and commodity data forms.

Sistem Sertifikasi Ekspor		internati	Data hengajuan	Data Necyat	Data Pati	logod
Data Pengajuan						
Data Profil	Data Kornoditas					
Email : sentramaju@gmail.com	Komoditos :					
Nome: CV. SENTRA MAJU UTAMA	Volume :					
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Nutu: Get234567991	Negara					
	Alamat Tujuan :					
						4
	Kirim Pengsjuon					

Figure 2 Submission Data Display

3. History data display

History data display is a table-shaped display that contains a history of export certificate submissions, besides that there is a search date, search button, detail button and print button.

anggat	mm/dd/yy	vy 🖻 mm/dd/yyyy	Pencorion						
how 1	a entries						Sear	ch	
No. 11	Tonggol II	User 11	Komoditas 0	Volume 11	Sotuan 11	Negara III	Alamat Tujuan	Status 11	
1	2023-06-22	CV. SENTRA MAJU UTAMA	DRAGON BLOOD	200	kilogram	HONG KONG	DANDELION PHARMACEUTICAL CO, UMITED	disetujui	Detail
2	2023-06-23	CV. SENTRA MAJU UTAMA	beras	12	kilogram	singapore	singapore singapore singapore	disetujui	Detail
з	2023-06-25	CV. SENTRA MAJU UTAMA	Bowong	5	kilogram	Spanyol	Street Noive 59Th	pengajuan	Detail
howing	1 to 3 of 3 entrie							Previous	1 Next

3 Sistem Sertifikasi Ekspor Balai Karantina Pertanian Kelas II Medan Kualanamu

Figure 3 History Data Display

The history data detail display is a display that contains detailed export certificate submission data and prints the certificate if approved.

Data Pengajuan					
Data Profil	Data Komoditas				
lmal : sentramaju@gmail.com	Komodikas : beros				
IRITIGI : CV. EINTER MAJU UTAMA IRITIGI : I. MATANARI RAYA, KOMPLIK ACABA SHOPHOUTE, NO IDH, KEL, MELVETIA TENDAH, KEC. MEDAN IRIVITA, KOTA MIDAN PROVINSI SUAATIRA UTARA	Volume : 12				
	Rohush: Klopsom v				
Nuhp: 08121456799	Negara : singapore				
	Alamot Tujuon : singapore singapore singapore				
	Batus : Pungajuan Diwenjul No Settimu: 2003.2010.0.0.195982 Tongga: 2003-0-23 Authorbes Office: :Surelia Catal Angelijaan				
	нарыя				

Figure 4 History Data Detail Display



Figure 5 Export Certificate Display

CONCLUSION

The results of the tests that have been carried out show that the export certification system at the Medan Kualanamu Class II Agricultural Quarantine Center has met the functional requirements. However, in the process it is still possible for errors to occur. Functionally, the system that has been built can produce the expected output.

REFERENCE

- D. M. Rangkuty and B. Efendi, "TEORI EKSPOR (Studi Kasus: Ekspor Indonesia ke Negara ASEAN)." [Online]. Available: https://www.researchgate.net/publication/357838357
- [2] "ANALISIS FAKTOR-FAKTOR YANG MEMPENGARUHI NILAI EKSPOR INDUSTRI KREATIF BIDANG KERAJINAN KAYU DI INDONESIA."
- [3] Z. Syahputra, "Website Based Sales Information System With The Concept Of Mvc (Model View Controller)," *Jurnal Mantik*, vol. 4, no. 2, 2020, [Online]. Available: https://iocscience.org/ejournal/index.php/mantik
- [4] S. E. Program *et al.*, "PERANCANGAN ARSITEKTUR ENTERPRISE PERGURUAN TINGGI MENGGUNAKAN TOGAF ADM (STUDI KASUS STP SAHID JAKARTA)."
- [5] M. Rosmiati, "Sistem Informasi Penerimaan Peserta Didik Baru Berbasis Web," *IJSE-Indonesian Journal on Software Engineering*, vol. 6, no. 2, pp. 182–194, 2020.
- [6] F. Ferdian, "RANCANG BANGUN SISTEM INFORMASI PENJUALAN BERBASIS WEB PADA UD. RUKUN MAKMUR."