

5th International Conference on Ethics and Environmental Policies
BUSINESS STYLES AND SUSTAINABLE DEVELOPMENT
Kyiv, April 2-6, 2003

- the prevention and resolution of environmental problems;
- establishing limits;
- establishing and nurturing institutions that effectively support environmental research, monitoring and management;
- warning threats and identifying opportunities;
- sustaining and, if possible improving, existing resources;
- where possible improving 'quality of live';
- identifying new technology or policies that are useful.

Let's consider the economic aspect of the solution to the given problem as a means of improving the management system of the forest enterprises.

The threat of a worsening ecological situation led to the introduction of several environmental management systems, which were based on international standards and accepted at a national level. These systems are gradually becoming accepted among the enterprise branch (such as SSTU ISO-14000 series, in particular ISO 14001-97 "Environment control Systems; structure and description of elements, and also manuals on their use" ISO 14004-97 "Environment control Systems; general manuals concerning principles of management systems and means of maintenance", ISO 14010-97"; manuals on realisation of ecological audit; and qualifying requirements to the auditors on ecology).

To achieve an environmentally oriented management that is uniformly integrated into the enterprise, it is necessary:

- to identify key ecological problems;
- to realise "transformation" of enterprises culture as a means of shaping an ecological consciousness among both high management and ordinary employees;
- to design the integrated purposes system;
- to define the ecological strategy of the enterprises;
- to introduce an eco-controlling system for planning, management and monitoring environmental measurements.

As it is known, the acceptance of optimum administrative solutions at any enterprise is possible with an effective information system, which ensure the management with an authentic and opportune information concerning activity of the enterprise. At the same time, management tends to achieve other economic, ecological, and political agendas. This is promoted by an adequate accounting subsystem.

2.1. Accounting as an instrument of management system

Accounting is a main component of an enterprise's information system and important management tool. It is a process of definition, measurement, registration, accumulation, and generalisation and transfers the information about activity of enterprises to the external and internal users for decision-making. Primal problems of the accounting are:

- Monitoring (supervision) of production process, its outcomes, such as profitability and liquidity;
- Informing the various interested groups: shareholders, staff, consumers and suppliers, creditors, and taxing authorities;
- Data origination for decision making at all management levels of the enterprise;
- Documentation of production processes (in monetary and natural units): means, obligations; incomes, costs etc. (Maksymiv, 1999).

Forest enterprises conduct accounting on the basis of accounting organisation and management in Ukraine, and since January 1, 2000 – a law on accounting and financial reporting in Ukraine, which is regulated by the legal ambushes of the organisation, oversees the accounting and assist in drawing up financial reports.

The accounting management in the forest branch is based on some general principles:

- the autonomy or principle of a registration unit (accounting entity) - each enterprise as a registration unit is legally independent and independent in the relation to the proprietor;

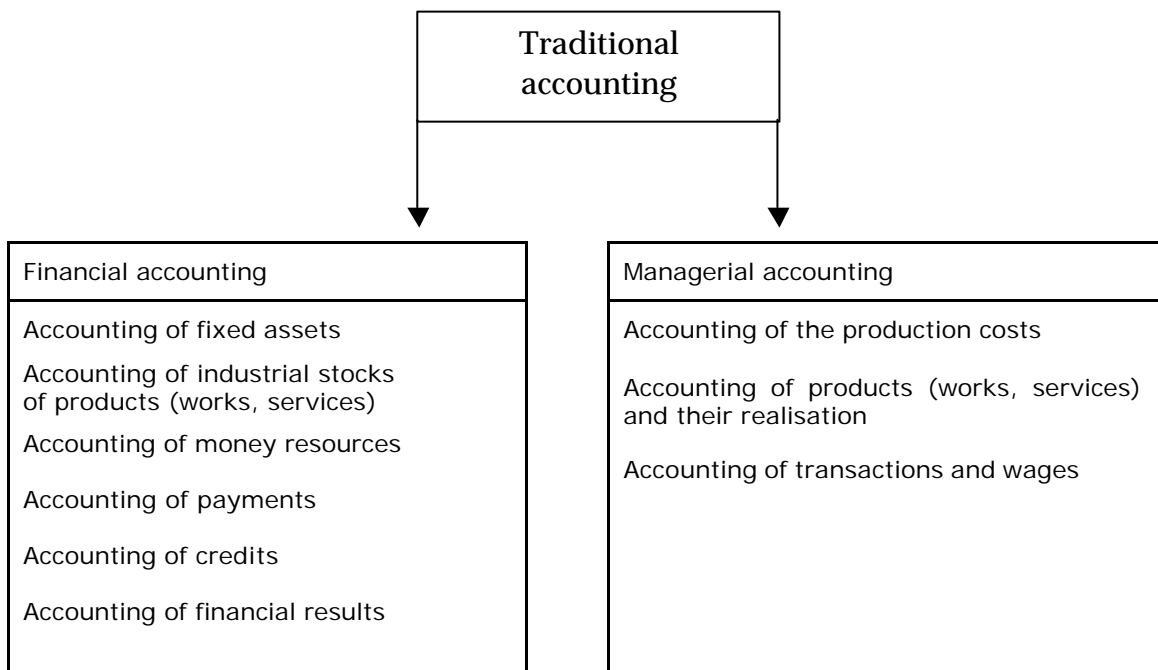
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- the continuity (going concern) – evaluation of assets and obligations of the enterprise is carried out proceeding from an assumption, that the volumes of its activity will not be reduced hereafter;
- the money measurement – book keeping operates with information that is given in specified monetary units;
- the historical (actual) cost price (historical cost) – the assets of the enterprise are evaluated as actual costs for their production or purchase, instead a market value;
- constancy - invariance of the chosen accounting policy;
- duality (double entry) – availability in book keeping of two aspects, one of which is represented by assets of the enterprise, and the other - requirements to them;
- Importance – the economic operations are reflected according to their own essence, as well as to others.

Accounting is oriented on the past, present and future. It determines the fact, scheduled, and prognostic data. Alongside with internal problems, it carries out the external problem of granting reports (determined legislatively or voluntary).

The traditional system of accounting is subdivided into two branches: financial and administrative (Figure 1).

Figure 1: The structure of traditional accounting



Financial accounting is determined by the above-mentioned principles. The financial report should be prepared by forms and parameters, which are made and settled upon in regard to the established parameters. It includes a reflection of all assets of the enterprise: the state of its accounts with partners in business, creditors, financial and other organs, and determination of a financial result of activity as a difference between incomes and costs for the certain accounting period. This type of accounting is regulated by standards and is mandatory for all enterprises, irrespectively on a pattern of ownership and subordination.

Managerial accounting attends to account the costs and incomes of separate kinds of production, cost centers and places, and also efficiency of resources, forecasting of final financial results depending on a modification of orders volume, perspective of realisation of production, and work and services. Due to managerial accounting, a high overall

performance of an accounting service, acting at the enterprise not independently but as a component of management system of enterprise, can be achieved.

Management accounting is conducted by enterprises with the purpose to secure the internal information needs of management and is closed for the external users. The state standards here are not stipulated. It however does not mean, that the given kind of the accounting is not regulated by the normative documents. So, depending on branch, the accounting of the costs is conducted on the basis of typical position of planning, accounting and calculation of production (work and services) in industry, agriculture, construction etc., and also Law of Ukraine "About the profit taxation of enterprises". In forestry the typical position acts with adaptation to conditions of the branch.

To represent an objective model of the enterprise, the accounting should reflect all parties of its activity. The origin of new aspects of management, the most actual for today of which is ecological, predetermines necessity to search the path to integrate the environmental accounting into traditional accounting system of enterprises.

2.2. Integration of environmental accounting into traditional accounting system

The fact, that the enterprise is necessary to consider and take into account as a part of a complex system, integrated with environment, becomes more and more obvious. In relation to environment an enterprise can be presented as an ecological black box.

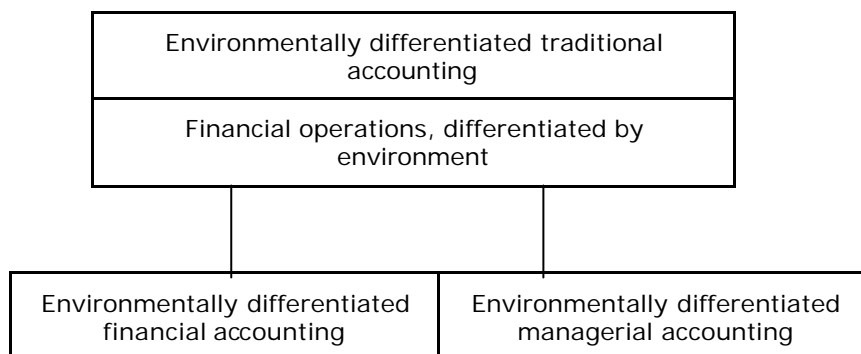
The integration of environmental accounting into a traditional accounting system of an enterprise is a complicated problem for several reasons. One of which is the boundedness of accounting predetermined by the mentioned above principle of a money measurement. In other words, magnitudes, which are not measured in money terms, are not the object of accounting. For this reason, raw material and materials of the enterprise, find a reflection in the accounting documents, and other magnitudes, as for example spent air and heating on output are not reflected in accounting registers - these magnitudes for today are taken into account only in natural units. An acceptable technique for these parameters that reflected in a universal monetary unit does not exist for today.

However this does not mean that the enterprises should refuse the accounting of these and other influences on environment. The absence of such accounting at the enterprises leads to un-inspected contamination of environment: water, air, soils, and emergence of excessive amounts of unutilised wastes. The level of ecological consciousness is at an insufficient level. As a result, the public is deprived the possibility to know about the level of influence on environment of each concrete enterprise.

Environmental Accounting includes activity, methods and systems for the reflection, analysis and reporting concerning financial transactions differentiated by environment, and also ecological influences of the certain economic entity (enterprise). Environmentally differentiated traditional accounting can be represented as follows (Figure 2) (Maksymiv and Podobyedova, 1999).

Environmentally differentiated managerial accounting is connected with environmentally differentiated costs and incomes. Environmentally differentiated costs with the purpose of environment protection can be changed both in the party of magnification, and in the party of a diminution. So, the additional costs include means for clearing structures, production of undesirable products etc. On the other hand the effective utilisation of resources, and diminution of the waste amounts and volume of undesirable products can save significant expenses.

Figure 2: The structure of environmentally differentiated traditional accounting



Thus environmental costs are the costs originating during the industrial activity of enterprise owing to influence on environment. Accounting of the environmental costs allows one to install an optimum ratio between reduction of an influence level on environment and volumes of the investments directed on its protection. The basis for such accounting is the differentiated accounting of cost kinds. A starting point of the accounting of costs kinds is the eco-balance, within the framework of which the entering and outgoing streams of raw material, materials, energy, water and other natural resources are taken into account. In most cases use of these resources can be calculated in money terms through concrete market prices.

3. Conclusions

The extension of the boundaries of the traditional accounting will enable enterprises to take more completely and objectively account for various aspects of their activity and, in particular, the level of influence on environment. At the same time, it will allow the excessive level of a burden on environment to be revealed and to take prevention measurements.

The integration of the environmental accounting in a system of environmental management will promote acceptance of effective management decisions taking into consideration ecological factor, improvement of the enterprises image in the eyes of the public, gain of a stable market position, and magnification of profitability as a main purposes of activity.

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