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FINANCIAL CONTROL AS FUNCTION OF MANAGEMENT SYSTEM

Summary
The article analyzes the nature and covers the main approaches of domestic and foreign scholars to the definition of «management», «control» and «financial control». Formulated author’s definition of «financial control». Also considered the subject, the object, the object of financial control. Highlighted the classification of financial control. Highlight audit as special an independent form of financial control and its role for the management system.

Keywords: management, government, control, financial control, financial auditing.

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SUSTAINABLE DEVELOPMENT OF AGRICULTURE IN THE CONTEXT OF PROVIDING FOOD SECURITY OF COUNTRY

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The essence of the concept of sustainable development, components and the parameters of its measurement are researched. Reviewed significance for sustainable agriculture in the context of food security in Ukraine with indexes of: availability, accessibility and sustainability. It was determined that the analysis of the demand and supply of food must take into account the following factors that influence their change: population, welfare, environmental quality, productivity in agriculture.

Keywords: agriculture, sustainable development, food security, natural capital, productivity.

Formulation of the problem. Today, croplands are one of the most extensive ecosystems on Earth, stretching across 12% of the planet’s ice-free land surface. Altogether, global croplands also represent 10–15% of the total biological productivity of the planet. However, society is still looking for ways to dramatically increase crop production, as population and economic pressures continue to mount through the 21st century. Changes in lifestyles and a shift away from diets heavy in grain-fed meat would be likely to relieve some of this pressure. Still, additional food, feed and biofuels will need to be produced if we are to provide for the additional 2.2 billion people that are projected to inhabit the planet by 2050. Already, we are expecting to need at least 50% more agricultural production by 2050 [4].

Increasing global crop production will be one of the greatest challenges facing humanity in the coming decades. On the surface, there appear to be two broad options for increasing global food production:

- expand the area of croplands at the expense of other ecosystems;
- increase the yields (per unit area) of our existing croplands.

Many foreign scientists showed that we are cultivating roughly half of the land that is suitable for agriculture on the planet today. However, much of the remaining cultivatable land rests under the tropical rain forests of South America and Africa – biomass that are of high social, economic and ecological value.

Therefore, improving the yield on existing agricultural lands is a high priority. However, increasing crop productivity on existing lands will also have consequences for social and ecological systems if we continue practising some of the techniques of modern industrialized agriculture. At present, much of our high-yielding agricultural lands are monocultures that receive high levels of water and chemical inputs, practices that have adverse impacts on water quality, soil quality and biodiversity. It is critical that creative and novel approaches be taken to ensure that in our pursuit of increasing yields we do not carry our most ecologically destructive agricultural practices into the future [1].

Thus, sustainable development society should include not only economic issue, but also social and environmental aspects, where agriculture is the key importance to guarantee such perspectives.
Analysis of recent research and publications. Sustainability problems are very common subject considering that population growth and non-renewable resources, e.g. mineral fuel, close to over. Disappointing forecasts require further research to build sustainable system of development. This theme are investigated many as Ukrainian scientists, e.g. Hoychuk O.L., Kalinchyk M.V., Trehobchuk V.M., Savchuk V.K., Shpychak O.M. and many other Ukrainian and foreign scientists.

The approach to sustainability is at the central theme of FAO's (Food and Agriculture Organization of the United Nations) new Strategic Framework. It is embedded in all five strategic objectives and is the specific focus of Strategic Objective 2, which aims at sustainability increasing the provision of goods and services from agriculture, forestry and fisheries. While the implementation of more sustainable policies and practices is the decision and responsibility of each Member Country, partnerships, coalitions and creative modes of collaboration will be increasingly important.

Emphasis is not resolved before the general problem. Modern conditions of society require paying more and more attention equilibrium components that ensure the normal functioning of every human being, namely, food and energy security, environmental protection and social stability. Today the situation is that of many countries suffer from hunger, increasing shortage of mineral and energy resources, there are uncontrollable climate change. These factors compel mankind to reflect on improving their conditions of existence.

Purpose of the article is to research sustainable development of society highlighting agriculture that include as food production, bioenergy and play an important role to improve environment.

The main material. Sustainability has become a catch-phrase to encompass almost anything: environmental friendliness; human well-being; land use change or lack thereof.

Unfortunately, there is no concrete definition or metric by which we could measure something sustainable or not. Therefore, it is up to individual interpretation. However, we may be able to agree on overall ideas [5]:

1) World Commission on Environment and Development (1987) – paths of human progress which meet the needs and aspirations of the present generation without compromising the ability of future generations to meet their needs;
2) Costanza et al (1991) a relationship between human economic systems and larger dynamic, but normally slower-changing ecological systems in which: (1) human life can continue indefinitely, (2) humans flourish, (3) human culture can develop; and the ecological life-support system is not destroyed.

An underlying theme is that each generation should have access to at least the same resource base as the previous generation. How do we measure this: physical quantity of natural resources; total economic value of resource stocks; unit value of resource/services (price); total value of resource/service flows through time.

Main components of sustainability are:
1) based on the definitions we discussed above, sustainable development involves elements and interactions between economic forces, social forces, environmental/Natural forces;
2) over time, the environment is an "agent of selection" which acts on economic agents (we adapt to the environment and change our economic and social institutions).

At the picture 1 are presented three spheres of sustainability.

To measure sustainability development it is important to know indicators of sustainability:

- key Concept: population-environment interactions can cause feedback processes which may produce spiraling (extreme outcomes) crises or sustainable equilibrium;
- how to prevent spiraling? (there are some resoves: limit human scale to a level that is within carrying capacity of environment; technical change that increases efficiency and durability while preserving output; preserving harvest rates of renewables and limiting waste emission rates to environmentally assimilative capacities; restricting non-renewable use to the level of creation of renewables.

In terms of land use and growth scientist Perrings in 1990 named sustainable economic growth is growth that is not threatened by biophysical feedback in the forms of: (1) exhaustion of resources which have no substitutes; (2) degradation of the assimilative capacity of the environment.

Researching agriculture in the aspect of sustainable development we have to consider Natural capital. It refers to the earth as a life-support system. Thinking of earth as a life-support system, the qualitative differences between human made and natural capital are important:
1) natural capital is not producible by humans, but it can be modified. Its use is irreversible;
2) natural capital more fundamental than manufactured capital;
3) natural capital may not always be substituted for manufactured capital;
4) changes in the environment may influence the availability of natural capital.

Sustainability, therefore, is much more than ensuring protection of the natural resource base. To be sustainable, agriculture must meet the needs of present and future generations for its products and services, while ensuring profitability, environmental health, and social and economic equity. Sustainable agriculture would contribute to all four pillars of food security – availability, access, utilization and stability – in a manner that is environmentally, economically, and socially responsible over time [6].

As agriculture depends largely on the services provided by ecosystems, sustainable agriculture must minimize negative impacts on the environment while optimizing
production by protecting, conserving and enhancing natural resources and using them efficiently. It must also strike a balance between protecting agro-ecosystems and meeting society’s growing needs by offering decent and resilient livelihoods for rural populations [2].

At the same time sustainability is caused such challenges: habitat destruction – often manmade; pollution – habitat may not be suitable for use/resources destroyed; invasive species – can destroy food stores/environment; population – more people increase demand for goods and resource use; over harvesting – we may consume more than the environment can reproduce [3].

Food security is a complex phenomenon that manifests itself in numerous physical conditions resulting from multiple causes. The World Food Summit of 1996 established four dimensions of food security: availability, access, stability and utilization. The State of Food Insecurity in the World 2013 introduced a suite of indicators organized around these four dimensions. By measuring food security across its four dimensions, the suite of indicators provides a more comprehensive picture, and can also help in targeting and prioritizing food security and nutrition policies [6].

The availability dimension captures not only the quantity, but also the quality and diversity of food. Indicators for assessing availability include the adequacy of dietary energy supply; the share of calories derived from cereals, roots and tubers; the average protein supply; the average supply of animal-source proteins; and the average value of food production.

The access dimension comprises indicators of physical access and infrastructure such as railway and road density; economic access, represented by the domestic food price index; and the prevalence of undernourishment.

The stability dimension is divided into two groups. The first group covers factors that measure exposure to food security risk with a diverse set of indicators such as the cereal dependency ratio, the area under irrigation, and the value of staple food imports as a percentage of total merchandise exports. The second group focuses on the incidence of shocks such as domestic food price volatility, fluctuations in domestic food supply, and political instability.

The utilization dimension also falls into two groups. The first encompasses variables that determine the ability to utilize food, notably indicators of economic access and stability to show situations, and can also help in targeting and prioritizing food security and nutrition policies [6].

The following table presents the food security indicators for Ukraine:

<table>
<thead>
<tr>
<th>Food security indicators of Ukraine</th>
<th>Table 1</th>
</tr>
</thead>
<tbody>
<tr>
<td>Indexes of food security</td>
<td>2011</td>
</tr>
<tr>
<td><strong>1. Availability</strong></td>
<td></td>
</tr>
<tr>
<td>average dietary energy supply</td>
<td>125</td>
</tr>
<tr>
<td>adequacy, %</td>
<td>418</td>
</tr>
<tr>
<td>average value of food production, 1$ per caput</td>
<td>42</td>
</tr>
<tr>
<td>share of dietary energy supply</td>
<td></td>
</tr>
<tr>
<td>derived from cereals, roots and</td>
<td></td>
</tr>
<tr>
<td>tubers, %</td>
<td>86</td>
</tr>
<tr>
<td>average protein supplement, gr/caput/day</td>
<td>41</td>
</tr>
<tr>
<td>average supply of protein of animal origin, gr/caput/day</td>
<td>-</td>
</tr>
<tr>
<td><strong>2. Access</strong></td>
<td></td>
</tr>
<tr>
<td>percent of paved roads over total</td>
<td>97.9</td>
</tr>
<tr>
<td>roads, percentage of total road</td>
<td></td>
</tr>
<tr>
<td>road density, per 100 square km of</td>
<td>28.1</td>
</tr>
<tr>
<td>land area</td>
<td></td>
</tr>
<tr>
<td>rail lines density, per 100 square km of</td>
<td>3.6</td>
</tr>
<tr>
<td>land area</td>
<td></td>
</tr>
<tr>
<td>gross domestic product per capita (in purchasing power equivalent), constant 2011 int.$</td>
<td>8395.2</td>
</tr>
<tr>
<td>domestic food price index</td>
<td>1.45</td>
</tr>
<tr>
<td><strong>3. Stability</strong></td>
<td></td>
</tr>
<tr>
<td>cereal import</td>
<td>0.7</td>
</tr>
<tr>
<td>dependency ratio, %</td>
<td>6.7</td>
</tr>
<tr>
<td>percent of arable land equipped for irrigation, %</td>
<td>6</td>
</tr>
<tr>
<td>value of food imports over total merchandise exports, %</td>
<td>-0.02</td>
</tr>
<tr>
<td>political stability and absence of violence/terrorism</td>
<td>6.4</td>
</tr>
<tr>
<td>domestic food price volatility index</td>
<td>27.6</td>
</tr>
<tr>
<td>per capita food production variability, constant 2004-2006 int. $ per capita</td>
<td>95</td>
</tr>
<tr>
<td>food supply variability, kcal/caput/day</td>
<td>-</td>
</tr>
</tbody>
</table>

Source: built by the Statistical data of the FAO [5]

Ukrainian agricultural sector is a substantial in national economy. There are many reasons of the essential meaning of the agriculture role by diversifying as inside the country as well as worldwide providing food, feed, improve environment, social responsibility and energy issues. Key importance of Agriculture Policy is food safety.

In future prospects for food supply and demand, there are four particularly critical factors: popula-
tion, prosperity, pollution, productivity in agriculture which interacts with each other in complex ways:
- as population grows, urban and industrial water users compete with agriculture for scare water;
- population growth slows as people become more prosperous;
- as agricultural productivity increases, economic prosperity improves for the entire economy;
- increased use of agricultural chemicals may improve productivity while harming the environment.

Government policies can influence the long-term supply-and-demand balance of food. However, the complexity of these interactions illustrates how difficult it can be to decide among various policy alternatives.

**Conclusions and suggestions.** Nowadays the modern world is faced with the problems of food security, energy supply and ecology. At the same time, the annual growth of world population deepens the social, economic and environmental crisis.

Improve the condition of the society can approach through rational and effective environmental management system in sustainable development. It is important to develop new directions, e.g. bioeconomy be implemented in all areas of due to the fact that a new generation of technologies reduces the risk of environmental pollution compared to conventional technologies, and in turn, economic growth has a positive impact on the environment.

Achieving sustainability in food and agriculture is envisioned as an ongoing process of identifying and striking a balance between agriculture’s social, economic and environmental objectives, and between agriculture and other sectors of the economy.

The process reflects the evolution of society’s values and accumulated knowledge, which have a major impact on how sustainability goals are set in practice. This implies a large, complex and dynamic set of interactions with multiple entry points. Within this complex system, specific constraints and natural and socio-economic boundaries will define what falls into the sustainable operating space: there are hard boundaries as well as soft constraints within which human and natural systems must operate in order for the overall process to be sustainable.

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