

Contents

| | |
|--|-----------|
| Contents | 5 |
| 1 Introduction to the study of the economy of the environment and natural resources | 7 |
| 1.1 Introduction | 7 |
| 1.2 Definitions of basic environmental terms | 8 |
| 1.3 Theoretical-methodological foundation of the economic approach | 13 |
| 1.3.1 Development of the environment protection solutions in the economic theory | 14 |
| 1.3.2 Theoretical-methodological foundation of the environment protection economics in the present | 22 |
| 1.3.3 Environmental economics | 24 |
| 1.3.4 Ecological economics | 25 |
| 2 Economy and Environment | 28 |
| 2.1 Mutual relations between economy and environment | 28 |
| 2.1.1 Production and regulation functions of environment | 30 |
| 2.1.2 Function of environment as the source of natural beauty, relaxation, aesthetic, cultural and social values | 34 |
| 2.1.3 Supportive function of the environment | 37 |
| 2.2 Problems in the area of environment | 38 |
| 2.3 Laws of nature specifying mutual relations between economy and environment | 39 |
| 3 Economic growth and Environment | 44 |
| 3.1 Malthusian limits | 44 |
| 3.2 Economic growth limits in neoclassical economics | 46 |
| 3.3 Influence of economic growth on environment | 50 |
| 4 Sustainability Economics | 54 |

| | | |
|----------|---|------------|
| 5 | Selected aspects of the natural resources economic use | 59 |
| 5.1 | Taxonomy of natural resources | 59 |
| 5.2 | Theoretical approaches to exploitation and management of natural resources | 63 |
| 5.3 | Decision criteria for the natural resources allocation | 63 |
| 5.4 | Renewable natural resources management..... | 64 |
| 5.5 | Non-renewable natural resource management | 69 |
| 5.6 | Non-renewable resource basis definition..... | 72 |
| 5.7 | Non-renewable resources scarceness economic evaluation..... | 74 |
| 6 | Economic nature of damage to the environment in market economy | 76 |
| 6.1 | Market failure | 77 |
| 6.1.1 | Optimal resource allocation in market economy..... | 78 |
| 6.1.2 | Market failure causes | 79 |
| 6.2 | External effects as the causes to the environment damage | 80 |
| 7 | Economic activities impact on the environment optimization | 86 |
| 7.1 | Optimal extent of the environment pollution | 86 |
| 7.2 | Dynamic connections of the environment polluting optimization..... | 88 |
| 8 | Evaluation of economic activities impact on the environment | 91 |
| 8.1 | The significance of the evaluation of economic impacts on the environment | 91 |
| 8.2 | Physical evaluation..... | 94 |
| 8.3 | Monetary evaluation..... | 95 |
| 8.4 | Theoretical-methodological grounds of non-market evaluation of environmental costs and benefits | 96 |
| 8.5 | Evaluation methods based on the preferential approach..... | 102 |
| 8.6 | Evaluation methods based on the costs approaches | 105 |
| 8.7 | Evaluation methods based on the experts' approach | 107 |
| 9 | Literature | 111 |