

SUSTAINABILITY ANALYSIS OF RURAL DEVELOPMENT PROJECTS REGARDING AGRICULTURAL HOLDINGS

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Abstract

The sustainable development of the rural sector in Romania is a strategic objective of major importance for the country, and its achievement requires a systematic and coherent approach in attracting, adopting and implementing projects that contribute to achieving the targets set by 2025. This sustainable development has a significant impact not only on the quality of life of rural communities, but also on the whole national economy and the environment.

Analysing the sustainability of rural development projects on farms is an essential step in assessing and planning initiatives to improve their economic performance. In the context of focus area 2A, the focus is on two main objectives: improving the economic performance of agricultural holdings, which aims to increase farm income and profitability. The analysis of projects must include an assessment of the current economic situation of agricultural holdings, including income, production costs, profit margins and resource efficiency. The aim is to identify shortcomings and opportunities to improve the economic performance of agricultural holdings; facilitating the restructuring and modernisation of agricultural holdings: this objective focuses on supporting the transformations and upgrades needed for agricultural holdings to become more competitive in the market and diversify their activities. The analysis of projects should identify the modernisation needs of farms, including infrastructure, farm equipment, technologies and production capacities, it is also important to assess the degree of adaptation to market requirements and current trends, such as requirements for organic or sustainable products.

Key words: development, sustainability, investment, projects, holdings

The sustainable development of farms in Romania is a major objective for improving the quality of life in rural areas and ensuring a prosperous future for farming communities (Rusali M.A., 2013). In the period 2014-2021, numerous projects and measures have been implemented to achieve this objective and the analysis carried out has shown significant progress in the different sectors of activity and development, with a particular focus on agriculture and rural issues (Neculai C., 2012).

Promising results have been achieved in focus area 2A, which aims at improving economic performance in agriculture. Under measure M04 “Investment in Real Assets” a total of 471 men and 210 women under 40 years of age, together with 125 men and 46 women over 40 years of age, received support to modernise and restructure agricultural activities (MADR, 2022). This has contributed to increased market participation and diversification of agricultural activities, with a positive impact on

economic sustainability in rural areas (European Commission 2015a).

Focus Area 2B, which focuses on facilitating the entry of young and skilled farmers into the agricultural sector, has had a significant impact. Through measure M06 “Farm and business development” 6.451 men and 4.460 women under 40 received support to get involved in agriculture and 789 legal entities benefited from development measures (European Commission 2015b).

Under priority axis 5, which aims to promote resource efficiency and the transition to a low-carbon economy, good progress has been made. Under measure M04 “Investment in Real Assets” 59 men and 23 women under 40 years of age, together with 13 men and 5 women over 40 years of age, received support. In addition, 284 legal entities were supported in this direction. These measures have helped to promote sustainability and climate resilience in the agricultural sector (Annual Implementation Report of the RDP 2014-2020 for 2021). Efforts in the period 2014-2021 for sustainable farm development in Romania have had

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a significant impact in improving economic performance, promoting sustainable agriculture and ensuring a generational renewal in the sector (Slătmo E., 2017). With the continuation of these efforts and continuous evaluation of results, Romania can progress towards a sustainable and climate-resilient agricultural economy by 2025.

MATERIAL AND METHOD

The methodology used in the analysis was based on a detailed case study and analysis of a wide range of resources, including official reports and statistics provided by the National Institute of Statistics (INS) and the Ministry of Agriculture and Rural Development. This methodology allowed for a rigorous assessment of the progress and impact of EU-funded projects in the Romanian countryside.

Six priority areas for sustainable farm development in Romania were highlighted and analysed in this study, each playing an important role in improving the quality of life in rural areas by: promoting knowledge transfer and innovation, strengthening farm viability, promoting food chain organisation, restoring, preserving and improving ecosystems, promoting resource efficiency, promoting social inclusion and economic development.

For each of these areas, various measures and sub-measures have been adopted and analysed, each with a specific rural development objective. These measures included knowledge transfer, investment in physical assets, farm development, basic services, promotion of organic farming, risk management.

This analysis and evaluation methodology allowed the identification of the real impact of EU-funded projects in the sustainable development of farms in Romania and provided the basis for decision making and future policy development in this area. The detailed analysis of each measure and sub-measure provided a comprehensive overview of the progress made and the needs for further farm development.

RESULTS AND DISCUSSIONS

Within the framework of sustainable farm development in Romania, 19 measures or sub-measures have been adopted and implemented, each with specific objectives to support the development and improvement of conditions in rural areas. These measures were established according to the relevant article of European and national legislation and covered a wide range of rural development issues: M01 - knowledge transfer and information actions (Art. 14), M02 - advisory services, farm management services (Art. 15), M03 - quality schemes for agricultural and food products (Art. 16), M04 - investment in physical assets (Art. 17), M05 - restoring agricultural production potential damaged by natural disasters and catastrophic events and introducing appropriate prevention measures (Art. 18), M06 - farm and business development (Art. 19), M07 - basic services and village renewal in rural areas (Art. 20) (Terres J. *et al.*, 2016).

These measures have played a key role in promoting sustainable development in rural Romania and have contributed to improving the quality of life for rural communities.

In terms of segmentation by type of agricultural branch, M04 “Investment in physical assets” has been divided according to types of agricultural activities, with the distribution of operations supported under sM4.1 and sM4.2 (Bontron J.C., 2015).

According to *figure 1*, it can be seen that the largest share, i.e. 57.39%, of investments in physical assets were channelled into field crops. This was followed by permanent crops with a share of 13.90% and the non-agricultural sector, especially the food industry, with a contribution of 12.65%.

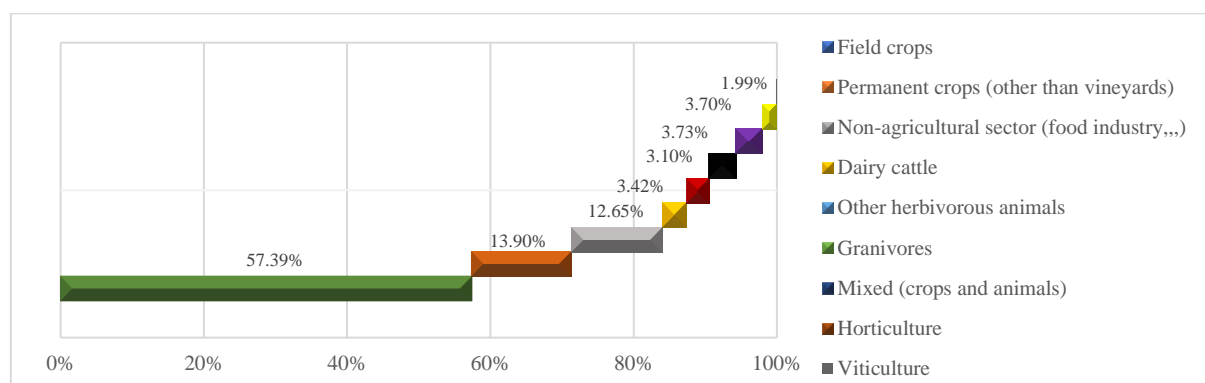


Figure 1 Distribution of investment in physical assets by type of agricultural industry under sM 4.1 and 4.2

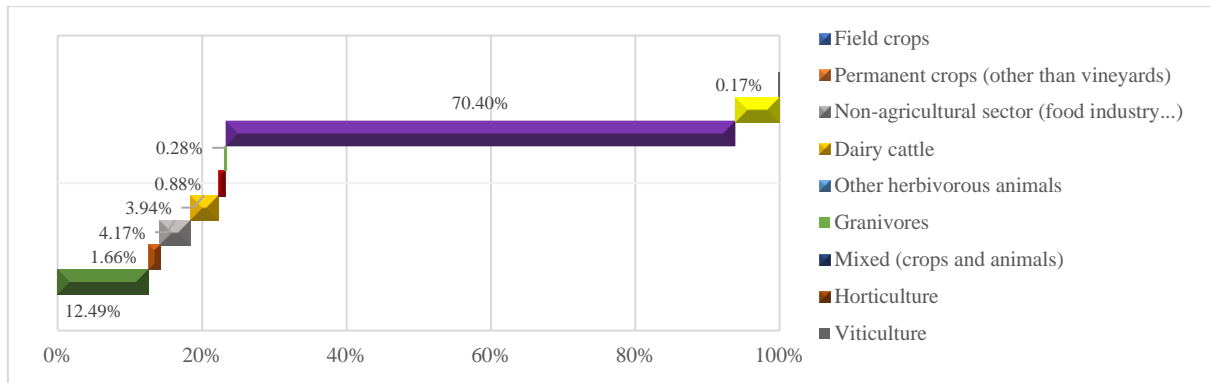


Figure 2 Distribution of farm and enterprise development by type of agricultural industry under sM 6.1, 6.2, 6.3 and 6.4

Figure 2 reveals the distribution of farm and enterprise development by type of agricultural branch in sM 6.1, 6.2, 6.3 and 6.4, thus it shows that farm and enterprise development had a significant share of 70.40% for mixed farms (combining both crops and livestock). These are followed by enterprises focusing on field crop production with a share of 12.49%. In contrast, the allocation of funds for farm and enterprise development was lower for permanent crops (1.66%), other grazing livestock (0.28%) and horticulture (0.17%).

For this planning period, farm and enterprise development data were not collected under measure 141 but were obtained through the specific situation analysis of financing operations and semi-subsistence farms. Most of these farms have mixed characteristics, combining livestock and crops. Farms financed under measure 141 are usually individual farms with a mixed production system, not very different from that of subsistence farms, but with a stronger market orientation (Camaioni B. *et al.*, 2013). Farmers running semi-subsistence farms carry out various agricultural activities, such as growing crops and raising animals, in line with the traditions specific to Romanian rural areas, these farms are characterised by a very diversified production structure, adapted to the needs of the family.

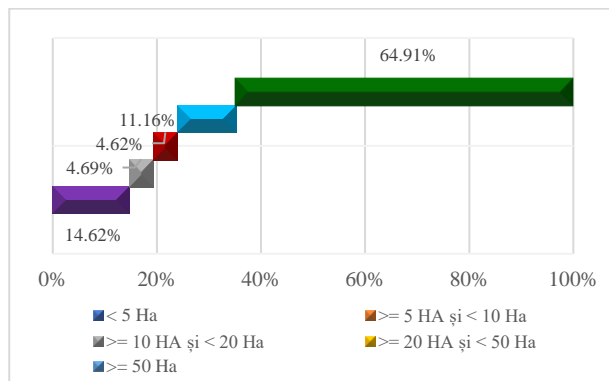


Figure 3 Distribution of investment in physical assets by holding size in sM4.1 and 4.2

As regards the analysis of farm development by farm size, figure 3 gives a detailed overview of the relevant percentages for the different farm sizes.

When considering farm size, the analysis of investments in physical assets under sM4.1 and 4.2 reveals that the largest projects were on farms larger than 50 hectares, accounting for 64,91%, followed by farms smaller than 5 hectares, which accounted for 14.62%, and farms between 20 and 50 hectares, which accounted for 11.16% of the total.

Figure 4 shows the structure of farm and enterprise development by farm size through operations supported under sM6.1, 6.2, 6.3 and 6.4.

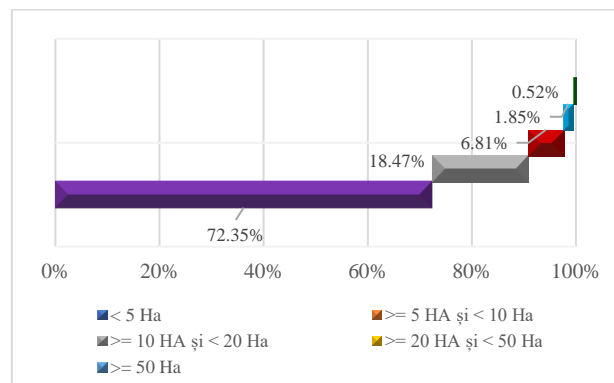


Figure 4 Distribution of farm and enterprise development by farm size in sM6.1, 6.2, 6.3 and 6.4

When analysing the operations supported under sM6.1, 6.2, 6.3 and 6.4 according to farm size, it can be seen that farms smaller than 5 hectares have a significant share of 72.35%. They are followed by farms between 5 and 10 hectares, which account for 18.47% of the total, and farms between 10 and 20 hectares, which account for 6.81%.

An analysis of public expenditure on transitional measures revealed that in 2021 there was 2.312.125 euro of public expenditure on these measures, according to the percentages shown in figure 5.

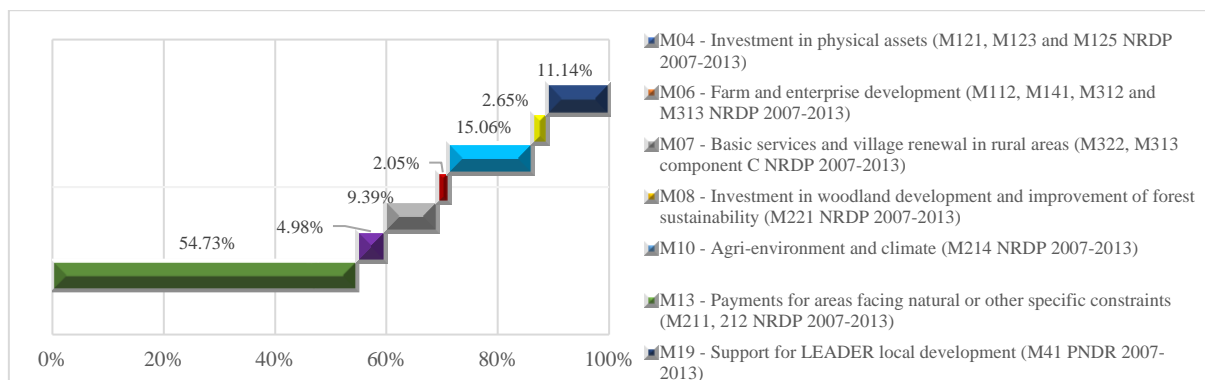


Figure 5 Distribution of expenditure on the various sustainable farm development measures in Romania

Concerning the transit projects, which have been started but not yet completed, at measure level, the situation is as follows: M04 - Investment in physical assets: 20 projects with a public value outstanding of 4.605.958 euro; M06 - Farm and enterprise development: 8 projects with a public value outstanding of 282.921 euro; M07 - Basic services and village renewal in rural areas: 27 projects with a remaining public value to be paid of 16.613.453 euro; M08 - Investment in woodland development and improvement of forest sustainability: 9 projects with a remaining public value to be paid of 295.735 euro; M19 - Support for LEADER local development: 4 projects with a remaining public value to be paid of 99.083 euro.

Analysis of the development of small farms supported by the RDP reveals a very low percentage in the period 2014-2021, representing only 0.18% of the total. However, there is a target for 2025 to be reached, which is 4.10% (figure 6).

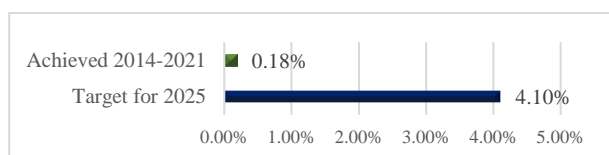


Figure 6 Percentage of small farms supported by RDP for investment and modernisation

The percentage of medium-sized farms supported by the PDP for investments in restructuring or modernisation in the period 2014-2021 is 3.34% of the total. There is also a 2025 target to be reached, which is 4.75% (figure 7).

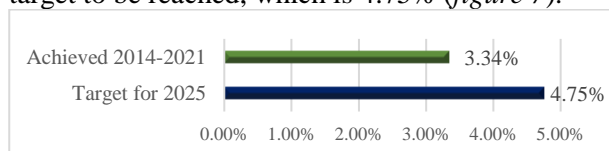


Figure 7 Percentage of medium-sized farms supported by RDP for investment and modernisation

The percentage of viable irrigated land switching to a more efficient irrigation system was 61.87% in the period 2014-2021. However, a 2025 target of 63.35% is envisaged (figure 8).

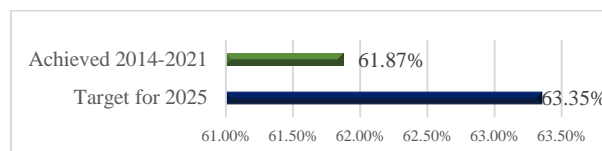


Figure 8 Percentage of viable irrigated land switching to a more efficient irrigation system

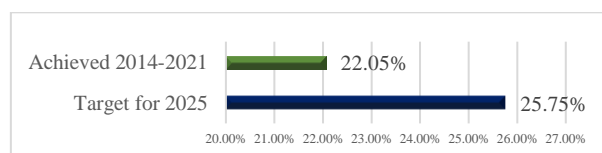


Figure 9 Percentage of farms between 12 000 and 50 000 PS supported by RDP for investments for young farmers

Under sub-measure 19.1 “Preparatory support for the formulation of local development strategies”, 159 projects were implemented with public expenditure amounting to 1.975.014 euro. As regards sub-measure 19.2 “Support for the implementation of local development strategies”, 8.161 projects were implemented in the period 2014-2021, of which 1.872 were related to transformation, with areas of intervention classified according to the main contributions.

A total of 6.682 actions were completed in 2021, with public expenditure totalling 280.360.458 euro. Of these, 1.868 actions were transition-related and totalled a total public expenditure of 33.026.482 euro. Under sub-measure 19.3 - sub-project A, which provides preparatory technical assistance for cooperation projects of selected local action groups, 56 projects were implemented with public expenditure of 146.654 euro.

Area of interest 2A) recorded committed expenditure amounting to 11.618.931 euro, of which 2.895.000 euro came from EURI funds.

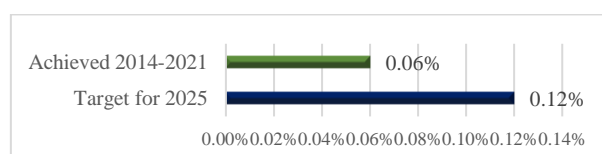


Figure 10 Percentage of farms with RDP support for investment and modernisation (Intervention Area 2A)

By 2021, 25.569 actions with a total value of public expenditure of 199.181.091 euro have been completed, of which 14.548 actions with a total value of public expenditure of 34.468.500 euro are related to transition.

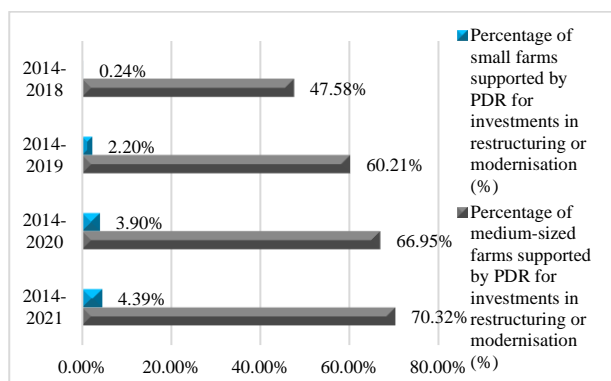


Figure 11 Focus Area 2A

Source: <https://www.madr.ro/pndr-2014-2020/implementare-pndr-2014-2020/raport-anual-pndr-2014-2020.html>

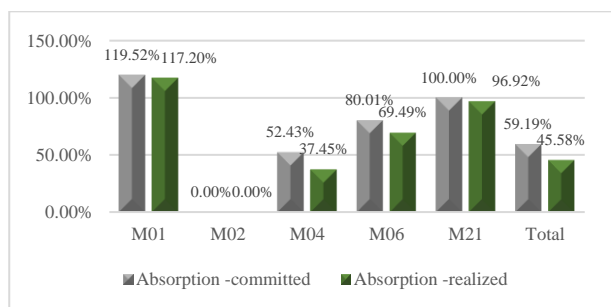


Figure 12 Expenditure on policy area 2A

Source: <https://www.madr.ro/pndr-2014-2020/implementare-pndr-2014-2020/raport-anual-pndr-2014-2020.html>

The main achievements under these measures are the following:

M04 - Investment in real assets: 2.836 support operations were carried out (of which 232 were transition-related and 655 involved financial instruments), with a total investment value of 1.223.878.790 euro (of which 88.302.027 euro was allocated to transition operations and 655 to financial instruments). Public expenditure amounted to 809.503.302 euro (of which 57.260.445 euro was for financial instruments).

At the end of 2021, 1.733 actions (allocations) were completed with a total value of public expenditure of 542.318.671 euro, of which 223 actions (with a total value of public expenditure of 54.517.249 euro) were related to transition.

M06 - Farm and enterprise development: 28.470 supported businesses were realised, of which 14.548 were related to transformation, with public expenditure of 31.817.341 euro (of which 34.468.500 euro was allocated to transformed businesses).

Figure 13 shows the percentage achieved in focus area 2B: Facilitating the entry of suitably

qualified farmers into the agricultural sector and, in particular, generational renewal.

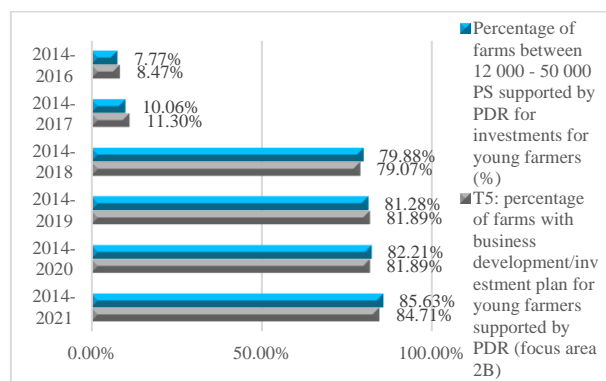


Figure 13 Focus Area 2B

Source: <https://www.madr.ro/pndr-2014-2020/implementare-pndr-2014-2020/raport-anual-pndr-2014-2020.html>

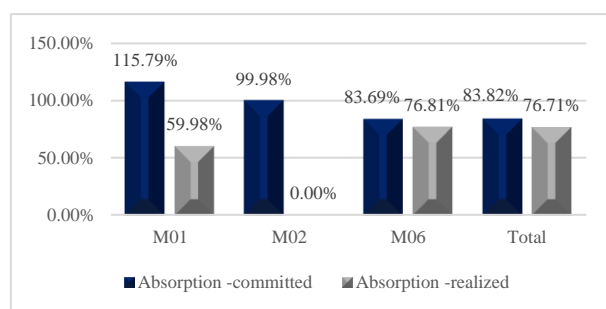


Figure 14 Expenditure on policy area 2B

Source: <https://www.madr.ro/pndr-2014-2020/implementare-pndr-2014-2020/raport-anual-pndr-2014-2020.html>

38.032.000 euro have been committed under focus area 2B), of which 15.710.000 euro came from EURI funds.

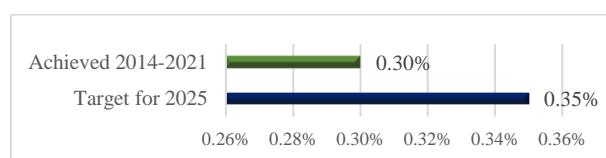


Figure 15 Percentage of agricultural holdings with investments/business plans for young farmers supported through the RDP (Intervention Area 2B)

M01 - Knowledge and Information Transfer Actions: 33 support actions were implemented, benefiting 4.634 people, who completed a total of 1.025 training days (final beneficiaries received 5 training days, with 8 hours of training per day).

The public expenditure recorded totalled 1.424.510 euro. M02 - Consultancy Services, Farm Management Services and Farm Replacement Services: no expenditure was recorded. M06 - Farm and Enterprise Development: 11.700 businesses were supported (of which 1.044 are related to transformation), with public expenditure amounting to 442.964.020 euro (of which 13.364.778 euro is allocated to transformed businesses). By the end of 2021, a total of 11.024 actions have been completed,

with a total public expenditure of 422.166.520 euro, of which 1.044 actions absorbed 13.364.778 euro related to transition.

CONCLUSIONS

Rural areas make up a significant part of the territory and population of the European Union, contributing to the diversification of the economy, growth in per capita GDP and the creation of new jobs. However, some rural areas face challenges such as declining population, unemployment and low quality of basic services, which can lead to a higher risk of poverty and social exclusion.

EU farm development policy aims to achieve long-term objectives such as diversifying the rural economy and improving infrastructure to make rural areas more resilient and less dependent on agriculture and forestry. EU-funded projects in these areas are geared towards sustainability and contribute to the regeneration of villages.

Considerable EU funding for on-farm infrastructure investments aims to improve basic services for the inhabitants of these areas and stimulate their development. In the 2007-2013 and 2014-2020 planning periods, the European Union has allocated significant resources for diversification measures and infrastructure investments in rural areas, thus contributing to sustainable development and reducing the gap between urban and rural areas.

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