## PA#16 Need for training and advisory to support the adoption and diffusion of innovative bio-based solutions in rural areas

Actors involved in the biomass supply chain need new knowledge and skills to accelerate the deployment of innovative, sustainable and circular biobased solutions which depend on the modernisation, strengthening and competitiveness of the bioeconomy in rural areas. They also need to adapt to the current multifaceted challenges (COVID-19, wars, energy crisis, climate change effects, etc.), the greening of the EU and the digital transformation, which promote continuous transformations and require new knowledge and information to adequately respond to changing conditions. Taking this into account, we surveyed more than 400 farmers and entrepreneurs, i.e. biological raw material producers (farmers, fishermen, foresters); and biological materials processors (small-scale bio-based industries, biorefineries and bioenergy producers) in rural areas to identify their training and advice needs for support to identify opportunities, adopts and diffusion of innovative biobased solutions. The survey was conducted across five bioeconomy sectors (agriculture and food, forestry and manufacture of wood and furniture, water systems - fishery, aquaculture, manufacture of biomaterials and biobased products, and bioenergy) and thirteen EU member states and North Macedonia in March-June 2023.

The survey revealed significant differences in the intensity of training and advisory support needs among farmers and entrepreneurs with different demographic and business structure characteristics (the percentages in brackets are calculated from the total number of survey takers in each category):

- In comparison, advisory support was found to be needed more than training in all five bioeconomy sectors mentioned above.
- The advisory support is more needed for farmers and food manufacturers (87%) as well as for bioenergy producers (72%), followed by foresters and manufacturers of wood products and furniture (68%) and fishermen (64%). The advisory support is least needed for producers of biomaterials and bio-based products (56%).
- Training is more needed for farmers and food manufacturers (61%) as well as for foresters for manufacturers of wood products and furniture (57%), followed by bioenergy producers (52%). The training is least needed for fishermen and representatives of aquaculture (64%) and producers of biomaterials and biobased products (36%).
- Additionally, we found that advisory and training support is more needed for natural persons than legal entities (86% and 64% v.v.72% and 50%, respectively). The training is the most needed for farmers and entrepreneurs with intermediate education than for those with advanced education (90% and 87%, respectively). Training support is more necessary for the farmers and entrepreneurs from remote rural areas than for those from rural areas close to a city (65% and 50%, respectively).

Where you can get the latest knowledge and advice

- Collaborate more with educational institutions (vocational schools, colleges and universities), participate in existing courses and trainings, or offer to organize new ones where you can gain the latest knowledge about innovative and circular biobased solutions.
- Join existing or create new networks for knowledge-sharing and mentorship networks that connect rural innovators with experts in innovative, sustainable, and circular bio-based solutions.

For more information, please consult the BioRural toolkit.

