SURXONDARYO VILOYATIDA QISHLOQ XO'JALIGI MAHSULOTINI EVIEWS YORDAMIDA KO'P OMILLI MODELLASHTIRISH VA PROGNOZLASH

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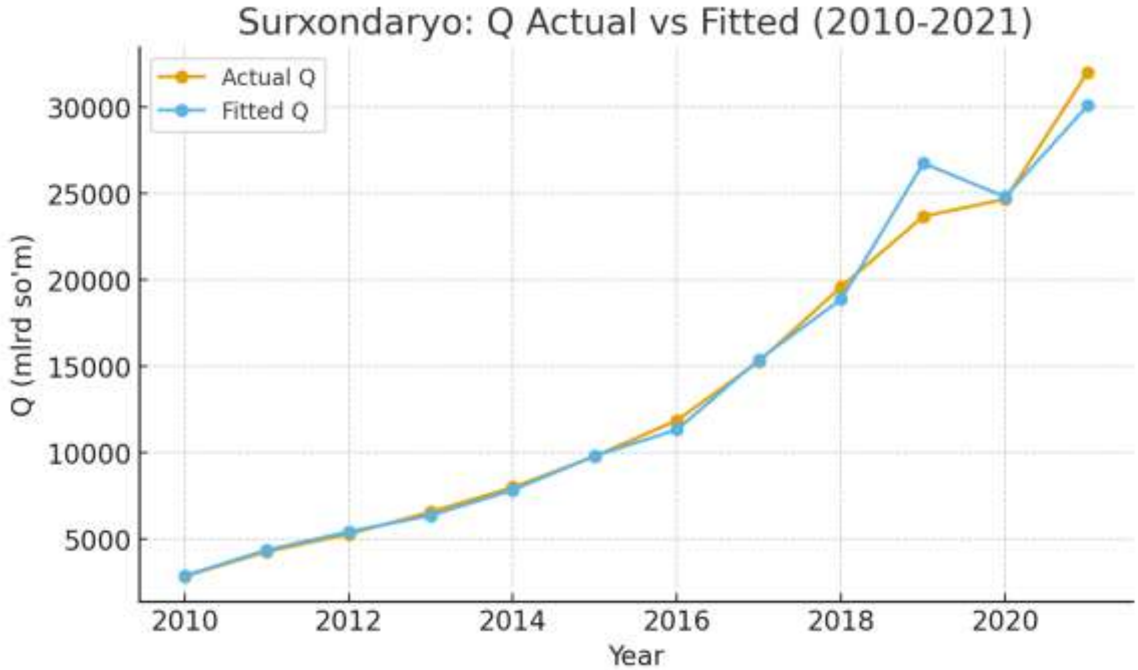
Annotatsiya

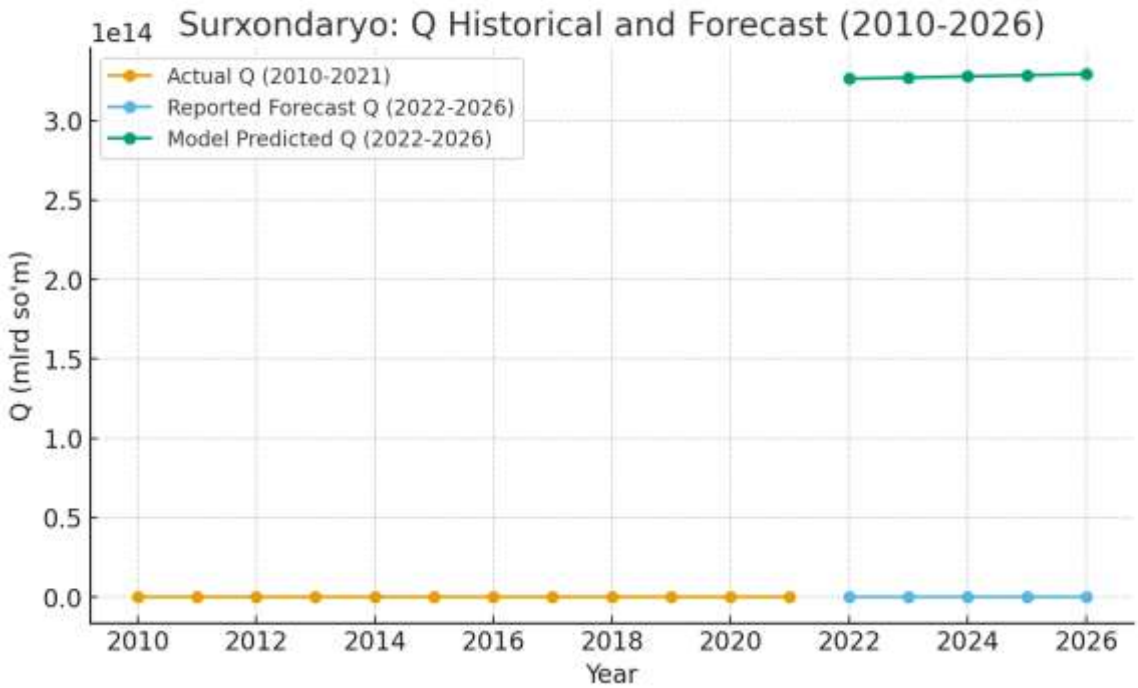
Mazkur maqolada Surxondaryo viloyatida 2010–2021 yillar oralig'ida qishloq xo'jaligi mahsuloti hajmi (Q)
kapital (K), mehnat (L) va yer (S) ko'rsatkichlari ta'sirida EViews dasturi yordamida ko'p omilli logarifmik model asosida
tahlil qilindi. Model quyidagi tenglama bo‘yicha baholandi va 2022–2026 yillar uchun prognozlar chiqarildi.
ln Q = 0.6984191 ln K + 4.143181 ln L - 1.612479 ln S - 11.51768Model natijalari
Model natijalari EViews dasturida baholandi. Quyidagi asosiy ko‘rsatkichlar olingan:
- LnK koeffitsienti: 0.6984191
- LnL koeffitsienti: 4.143181
- LnS koeffitsienti: -1.612479
- Konstanta: -11.51768
- R^2 = 0.99572
- F-statistic = 620.3746
- DW = 2.05384

Natijalar grafiklari



1-rasm.

Surxondaryo: 2010–2021 yillar uchun haqiqiy va model bo‘yicha hisoblangan qiymatlar.



2-rasm.

Surxondaryo: 2010–2026 yillar uchun haqiqiy va prognoz qiymatlar.

EViews kodi

' EViews command file to reproduce the log-linear model and forecasts
' Data should be in a workfile with freq=annual 2010-2026 (or 2010-2021 for estimation)
wfcreate(wf=surxondaryo) a 2010 2026

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' Read in historical data (2010-2021) - user can paste values manually or import CSV
' Example: series Q = 2841.1, 4264.9, 5283.6, 6575.4, 7992.4, 9796.6, 11873.4,
15290.9, 19606.3, 23686.7, 24689.7, 32030.4
' Replace the following with your import command, e.g. read(t=csv)
"/mnt/data/surxondaryo_agri_model/historical_data.csv"
' Log-transform variables
series lnQ = log(Q)
series lnK = log(K)
series lnL = log(L)
series lnS = log(S)
' Estimate log-linear model (OLS)
equation eq1.ls lnQ c lnK lnL lnS
' Show regression output
show eq1.output
' Generate fitted values and residuals
series lnQ_hat = eq1.@fitted
series Q_hat = exp(lnQ_hat)
series resid = lnQ - lnQ_hat
' Forecasting (example: using provided trend models for K,L,S)
' Create series for K_trend, L_trend, S_trend for 2022-2026
' K_trend = 874.9*t - 1889   (t = year)
' L_trend = 2.09*t + 315.86
' S_trend = -2.167*t + 237.45
' In EViews you can set series values for specific sample period:
smpl 2022 2026
series t = @year
series K_trend = 874.9*t - 1889
series L_trend = 2.09*t + 315.86
series S_trend = -2.167*t + 237.45
' Compute ln values and model-predicted lnQ and Q for forecast period
series lnK_tr = log(K_trend)
series lnL_tr = log(L_trend)
series lnS_tr = log(S_trend)
series lnQ_fore = 0.6984191*lnK_tr + 4.143181*lnL_tr + -1.612479*lnS_tr + -
11.51768
series Q_fore = exp(lnQ_fore)
' Show forecasted series
show Q_fore
```

Sana: 2025-11-02