What is claimed is:

1. An image decoding method performed by a decoding apparatus, comprising:

obtaining image information including residual information, reference picture-related information through a bitstream;

deriving at least one reference picture, based on the reference picture-related information;

generating reconstructed samples of a current picture, based on the residual information and the at least one reference picture; and

generating modified reconstructed samples, based on an in-loop filtering process for the reconstructed samples,

wherein the image information includes a sequence parameter set (SPS), and

wherein based on whether resampling for the at least one reference picture is enabled, it is determined whether the SPS includes the additional virtual boundaries-related information.

2. The image decoding method of claim 1, wherein the additional virtual boundaries-related information includes the number of virtual boundaries and positions of the virtual boundaries.

3. The image decoding method of claim 1, wherein the additional virtual boundaries-related information includes information on the number of vertical virtual boundaries, information on positions of the vertical virtual boundaries, information on the number of horizontal virtual boundaries, and information on positions of the horizontal virtual boundaries.

4. The image decoding method of claim 1,

wherein the image information includes a reference picture resampling enabled flag, and

wherein whether resampling for the at least one reference picture is enabled is determined based on the reference picture resampling enabled flag.

5. The image decoding method of claim 1,

wherein the SPS includes an SPS virtual boundaries present flag related to whether the SPS includes the additional virtual boundaries-related information, and

wherein a value of the SPS virtual boundaries present flag is determined to be 0, based on that resampling for the at least one reference picture is enabled.

6. The image decoding method of claim 1, wherein the additional virtual boundaries-related information is not included in the SPS, based on that resampling for the at least one reference picture is enabled.

7. The image decoding method of claim 6,

wherein the image information includes picture header information, and

wherein the picture header information includes the additional virtual boundaries-related information.

8. An image encoding method performed by an encoding apparatus, comprising:

generating residual samples for a current block;

generating residual information, based on the residual samples for the current block;

deriving at least one reference picture for reconstructed samples of a current picture;

generating reference picture-related information, based on the at least one reference picture;

generating in-loop filtering-related information for reconstructed samples of the current picture; and

encoding image information including the residual information, the reference picture-related information, and the in-loop filtering-related information,

wherein the image information includes a sequence parameter set (SPS), and

wherein based on whether resampling for the at least one reference picture is enabled, it is determined whether the SPS includes the additional virtual boundaries-related information.

9. The image encoding method of claim 8, wherein the additional virtual boundaries-related information includes the number of virtual boundaries and positions of the virtual boundaries.

10. The image encoding method of claim 8, wherein the additional virtual boundaries-related information includes information on the number of vertical virtual boundaries, information on positions of the vertical virtual boundaries, information on the number of horizontal virtual boundaries, and information on positions of the horizontal virtual boundaries.

11. The image encoding method of claim 8,

wherein the image information includes a reference picture resampling enabled flag, and

wherein whether resampling for the at least one reference picture is enabled is determined based on the reference picture resampling enabled flag.

12. The image encoding method of claim 8,

wherein the SPS includes an SPS virtual boundaries present flag related to whether the SPS includes the additional virtual boundaries-related information, and

wherein a value of the SPS virtual boundaries present flag is determined to be 0, based on that resampling for the at least one reference picture is enabled.

13. The image encoding method of claim 8, wherein the virtual boundaries-related information is not included in the SPS, based on that resampling for the at least one reference picture is enabled.

14. The image encoding method of claim 13,

wherein the image information includes picture header information, and

wherein the picture header information includes the additional virtual boundaries-related information.

15. The image encoding method of claim 8,

wherein the current picture includes a subpicture as only one subpicture,

wherein the subpicture is independently coded,

wherein the reconstructed samples are generated based on the subpicture,

wherein subpicture-related information is generated based on the subpicture, and

wherein the image information includes the subpicture-related information.

16. The image encoding method of claim 15, wherein a subpicture_treated_as_picture flag is not present in the image information.

17. The image encoding method of claim 16, wherein a value of the subpicture_treated_as_picture flag is set to 1.

18. The image encoding method of claim 8,

wherein the current picture includes subpictures,

wherein the subpictures are derived based on a merging process of two or more independently-coded-subpictures,

wherein the reconstructed samples are generated based on the subpictures,

wherein subpicture-related information is generated based on the subpictures, and

wherein the image information includes the subpicture-related information.

19. A non-transitory computer readable storage medium storing a bitstream generated by an image encoding method, the image encoding method comprising:

generating residual samples for a current block;

generating residual information, based on the residual samples for the current block;

deriving at least one reference picture for reconstructed samples of a current picture;

generating reference picture-related information, based on the at least one reference picture;

generating in-loop filtering-related information for reconstructed samples of the current picture; and

encoding image information including the residual information, the reference picture-

related information, and the in-loop filtering-related information,

wherein the image information includes a sequence parameter set (SPS), and

wherein based on whether resampling for the at least one reference picture is enabled, it is determined whether the SPS includes the additional virtual boundaries-related information.

20. A transmission method of data for an image, the method comprising:

obtaining a bitstream for the image, wherein the bitstream is generated based on generating residual samples for a current block, generating residual information, based on the residual samples for the current block, deriving at least one reference picture for reconstructed samples of a current picture, generating reference picture-related information, based on the at least one reference picture, generating in-loop filtering-related information for reconstructed samples of the current picture and encoding image information including the residual information, the reference picture-related information, and the in-loop filtering-related information; and

transmitting the data comprising the bitstream,

wherein the image information includes a sequence parameter set (SPS), and

wherein based on whether resampling for the at least one reference picture is enabled, it is determined whether the SPS includes the additional virtual boundaries-related information.